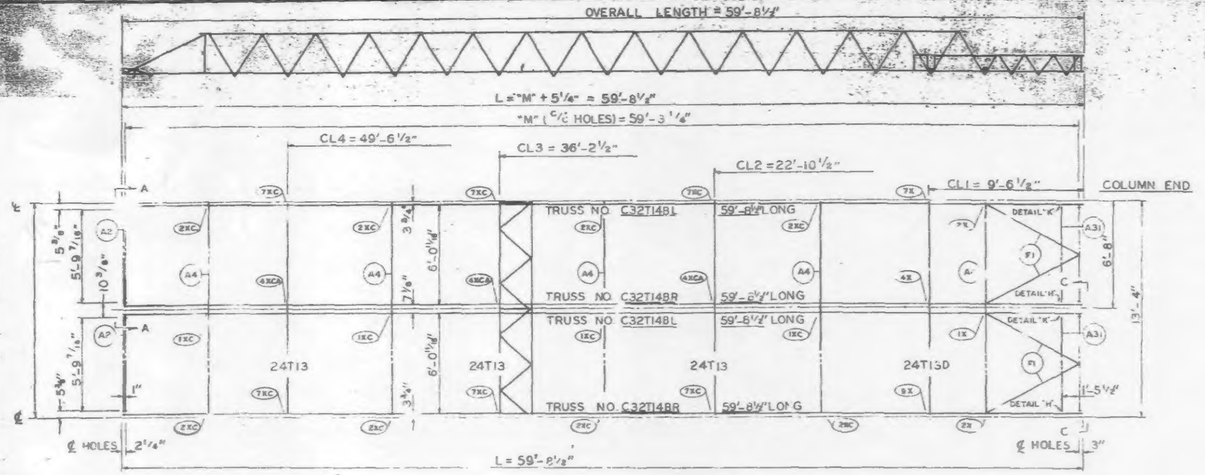
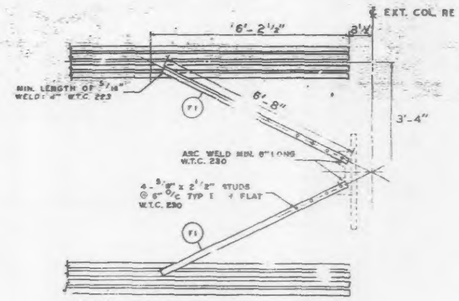
0800-0899

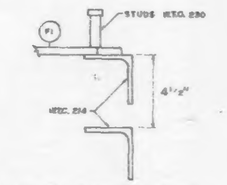
WTC1-131-LERA



PANEL NO. B7B SIZE 13'-4" x 59'-3 1/2"

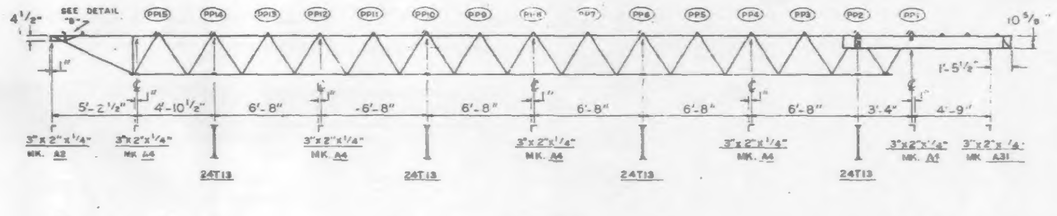


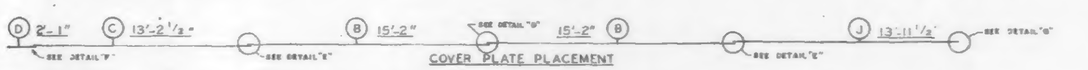
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T148L	2	C32T148L x 59'-8 1/2"	ST 214BL
	T148R	2	C32T148R x 59'-8 1/2"	ST 214BL
BRIDGING TRUSSES	T13	3	24T13 x 13'-3"	ST 213
	T13D	1	24T13D x 13'-3"	ST 213D
3"x 2"x 1/4" ANGLE	A2	2	3"x2"x1/4"x5'-11 3/16"	ST 403
	A4	5	3"x2"x1/4"x13'-3"	ST 403
	A31	2	3"x2"x1/4"x5'-8 1/8"	ST 410
CLOSURE PLATES	PF-11	2	3" x 1/4" x 0'-2 3/16"	ST 412
DIAGONAL FLATS	F1	4	1'-2" x 3/8" x 6'-8"	ST 402
PATCH PLATES	PP1	12	2" x 1/4" x 0'-9"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	4	9"x.0135" x 15'-2"	ST 303
	C	2	9"x.0135" x 13'-2 1/2"	ST 303
	D	2	9"x.0135" x 2'-1"	ST 303
	J	2	9"x.0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	16	2" x 1 1/2" x 25" x 6"	ST 400
"8 SHEAR ANCHOR	SA2	4	"8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	4	4'-2" x .39" x 1'-0"	ST 400
	P8	4	3" x 1/2" x 1'-2"	ST 409

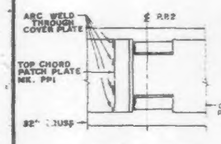




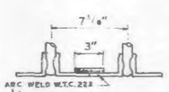
COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD

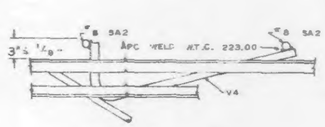
LOCATION OF PATCH PLATES ON BOTTOM CHORD



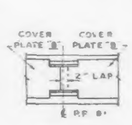
TOP VIEW - DETAIL "A"



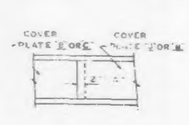
DETAIL "C"



DETAIL "B"

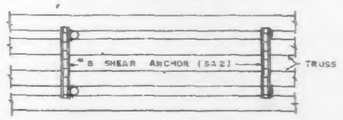


DETAIL "D"

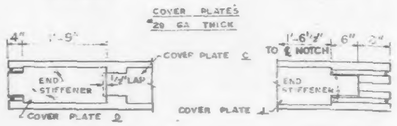


DETAIL E

DETAIL "A" SECTION B-B

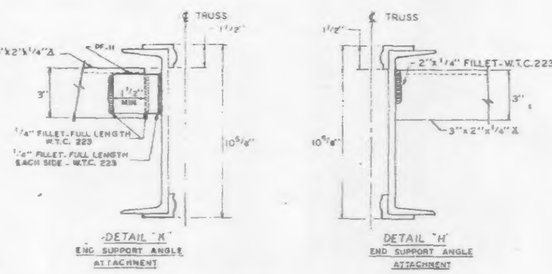


TOP VIEW DETAIL "B"



DETAIL "F" DETAIL "G"

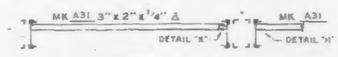
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



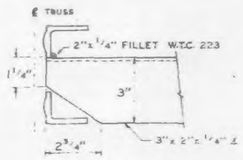
DETAIL "K" END SUPPORT ANGLE ATTACHMENT

DETAIL "H" END SUPPORT ANGLE ATTACHMENT

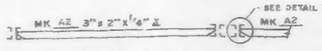
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (3K).
ALL CONNECTION DETAILS FOR FLOORS 25, 50 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.



SECTION C-C END SUPPORT ANGLE



DETAIL "J" END SUPPORT ANGLE ATTACHMENT



SECTION A-A END SUPPORT ANGLE

NO.	DATE	REVISION	BY

REE DRWG.

7-AB3-26	10-4-68
7-AB1-13	10-4-68
7-AB2-8	7-22-68
7-AB4-28	7-22-68
SB-124	7-24-69
7-AB3-24	8-15-68

Void

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. B FLOORS 92 (WEST)

PANEL B7B - 13'-4" x 59'-8 1/2"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-AB3-26 PLATE

APPROVED FOR FABRICATION BY _____ FOR P.O.N.Y.A. DATE _____

DRAWN BY LwR DATE MAY 8, 1969

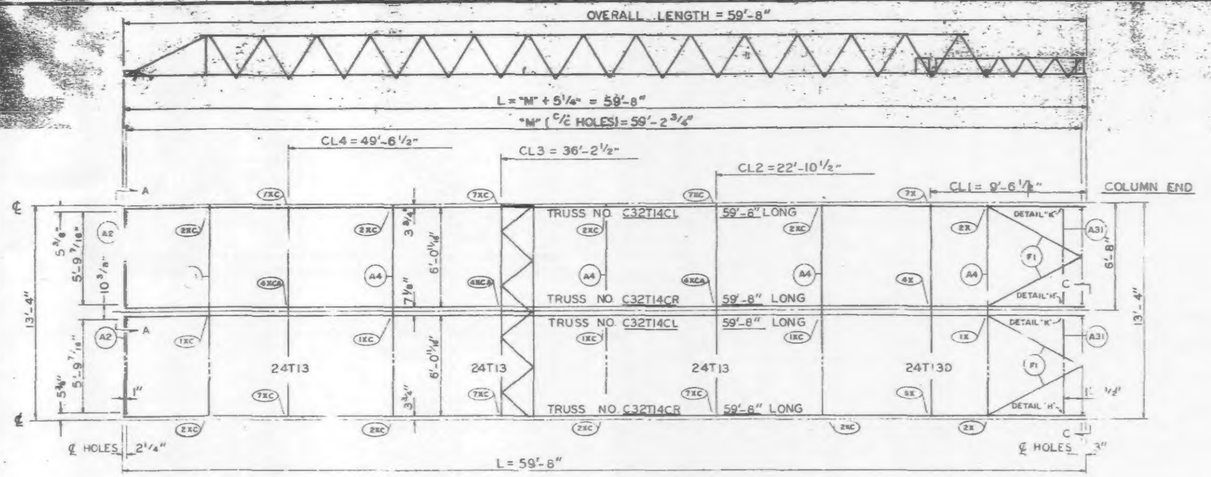
APPROVED FOR FABRICATION BY _____ FOR FABRICATOR DATE _____

CHECKED BY T.N. CHUBA DATE MAY 8, 1969 IN CHARGE OF PROD. DEV.

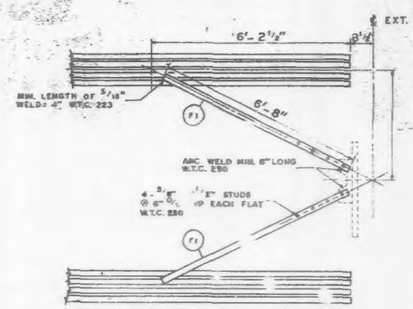
DETAILED BY LACLEDE STEEL CO.

FABRICATION CONT. NO W.T.C. 221

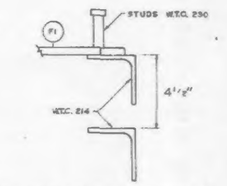
SHEET NO FP B7B



PANEL NO. B7C SIZE 13'-4" x 59'-8"



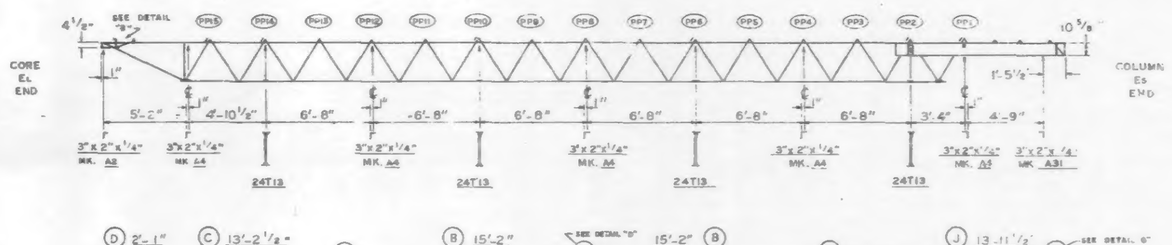
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

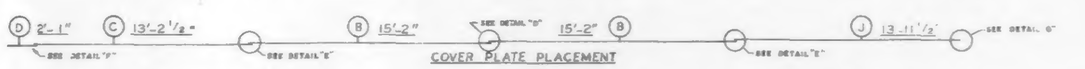


CLIP ANGLE LOCATION FOR DIAGONAL FLA.S 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T14CL	2	C32T14CL x 59'-8"	ST 214CL
	T14CR	2	C32T14CR x 59'-8"	ST 214CL
BRIDGING TRUSSES	T13	3	24T13 x 13'-3"	ST 213
	T13D	1	24T13D x 13'-3"	ST 213D
3" x 2" x 1/4" ANGLE	A2	2	3" x 2" x 1/4" x 5'-11 9/16"	ST 403
	A4	5	3" x 2" x 1/4" x 13'-3"	ST 403
	A31	2	3" x 2" x 1/4" x 5'-8 1/8"	ST 410
CLOSURE PLATES	PF-11	2	3" x 1/4" x 0'-2 3/16"	ST 412
DIAGONAL FLATS	F1	4	1 1/8" x 8 1/8" x 6'-8"	ST 402
PATCH PLATES	PP1	12	2" x 1/4" x 0'-9"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	4	9" x .0135" x 15'-2"	ST 303
	C	2	9" x .0135" x 13'-2 1/8"	ST 303
	D	2	9" x .0135" x 2'-1"	ST 303
	J	2	9" x .0135" x 33'-11 1/8"	ST 304
ANGLE CLIPS	C1	16	2" x 1 1/2" x .25" x 8"	ST 400
ø8 SHEAR ANCHOR	SA2	4	ø8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	4	4 1/2" x .39" x 1'-0"	ST 400
	P9	4	3" x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (12).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1/4" FULL THROAT FILLET.

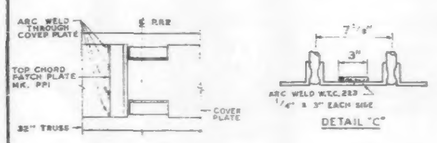


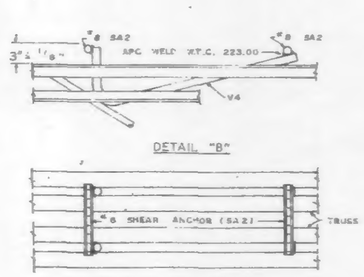


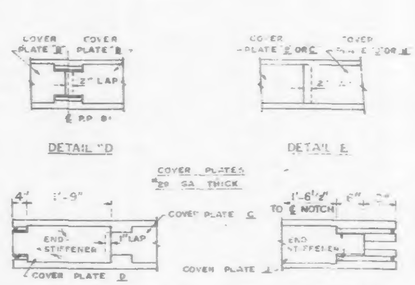
COVER PLATE PLACEMENT

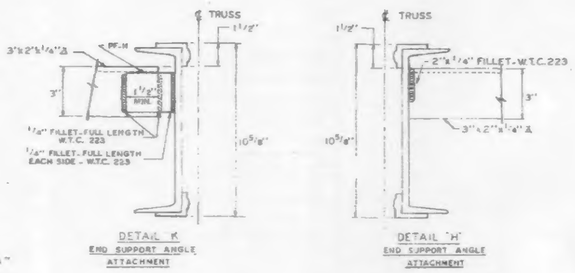
LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD

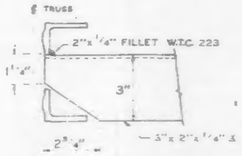


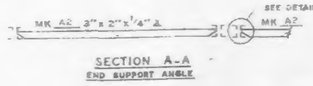






SECTION C-C
END SUPPORT ANGLE





SECTION A-A
END SUPPORT ANGLE

Void

NO.	DATE	REVISION	BY

REF DRWG.

7-A83-26	10-4-68
7-A81-13	10-4-68
7-A82-8	7-22-68
7-A84-28	7-22-68
SB-124	3-24-69
7-A83-24	8-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. B FLOORS 59 & 92 (EAST)

PANEL B7C - 13'-4" x 59'-8"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO 7-A83-26 PLATE

APPROVED FOR FABRICATION BY _____ FOR P.O.N.Y.A. DATE

DRAWN BY [illegible] DATE MAY 6, 1969

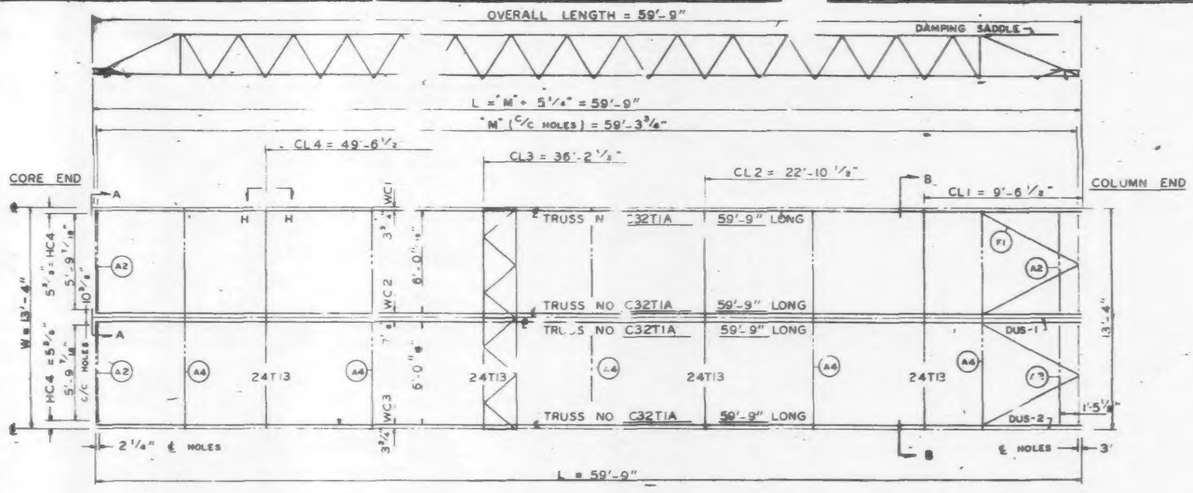
APPROVED FOR FABRICATION BY _____ FOR FABRICATOR DATE

CHECKED BY T.N. CHUNA DATE MAY 6, 1969 IN CHARGE OF PROD. DEP.

DETAILS APPROVED

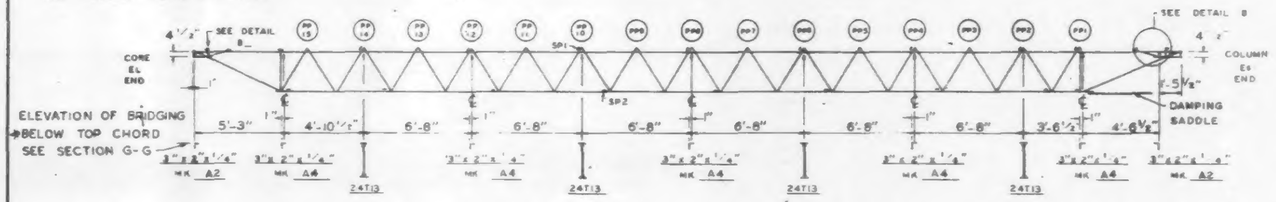
FABRICATION CONT NO W.T.C. 221

SHEET NO FP B7C



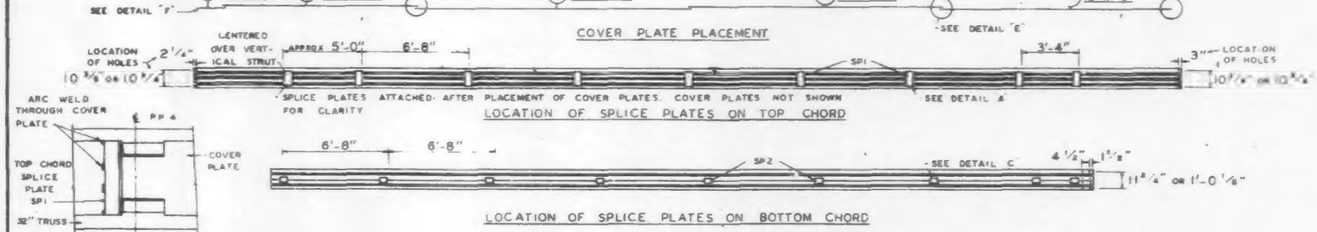
PANEL NO. B1A , SIZE 13'-4" x 59'-9"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES



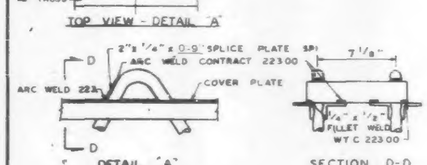
COVER PLATE PLACEMENT

LOCATION OF SPLICE PLATES ON TOP CHORD

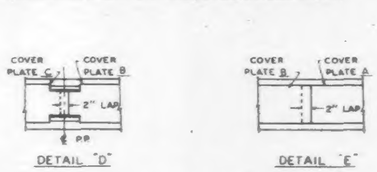


LOCATION OF SPLICE PLATES ON BOTTOM CHORD

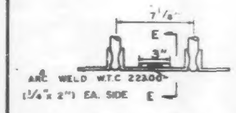
TOP VIEW - DETAIL "A"



DETAIL "A" SECTION D-D



DETAIL "D" DETAIL "E"



DETAIL "C"

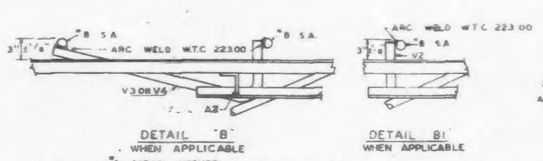
SECTION E-E

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FILLET WELDS

COVER PLATES 20 GA. THICK

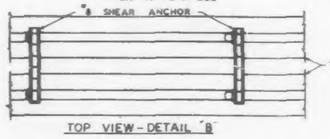
DETAIL "F" DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENER WTC 22300

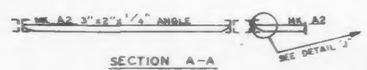


DETAIL "B" DETAIL B1

WHEN APPLICABLE

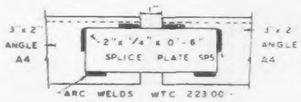


TOP VIEW - DETAIL "B"

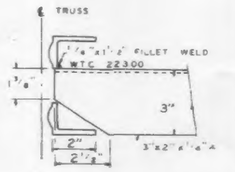


SECTION A-A

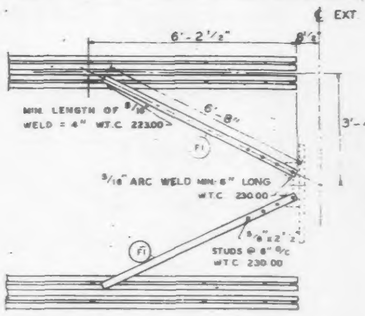
END SUPPORT ANGLES



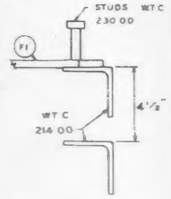
TYPICAL CONNECTION
LATERAL CONNECTION OF 3"x2" ANGLES



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

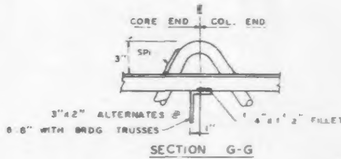


TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

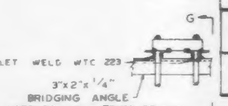


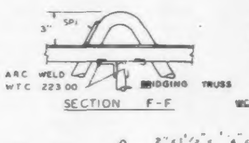
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS.		
FLOOR TRUSSES	T1A	4	C32T1A - 59'-9"	ST201A
BRIDGING TRUSSES	T13	4	T13 - 13'-8"	T211
3"x2"x1/4" ANGLE	A2	4	3"x2"x [illegible] -5-11 5/16"	ST400
	A4	5	3"x2"x [illegible] x 13'-5"	ST400
DIAGONAL FLATS	F1	[illegible]	1 1/2"x 5/16"x 8'-8"	ST400
SPLICE PLATE	SP1	[illegible]	2"x 1/4" x 0'-9"	CD201
	SP2	18	3"x 3/8"x 0'-4 1/2"	CD201
	SP5	5	2"x 1/4"x 0'-8"	CD201
COVER PLATES	A	2	9"x.0135"x 13'-11 1/2"	ST303
	B	4	9"x.0135"x 15'-2"	ST303
	C	2	9"x .0135" x 13'-2 1/2"	ST303
	D	2	9" x .0135" x 1'-9"	ST303
ANGLE CLIPS	C1	16	3"x2"x 1/4"x 0'-8"	CD201
3/4" ℄ SHEAR ANCHOR	SA	8	3/4" ℄ REBAR x 0'-9"	CD201
DAMPING SADDLE	DUS-1	1	3 1/2"x 3 1/2"x 5/8"x 3'-7 3/8"	ST298
	DUS-2	1	3 1/2"x 3 1/2"x 3/8"x 3'-7 3/8"	ST298
CONNECTION BAR	CB	16	3/4" ℄ x 0'-8"	CD201

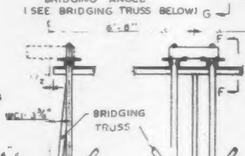


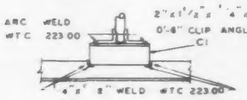
SECTION G-G



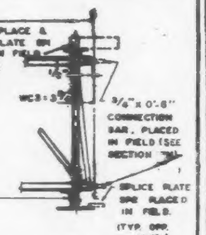


SECTION F-F

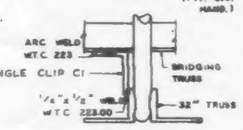




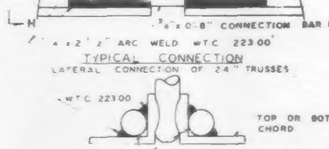
SECTION C-C



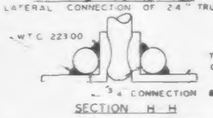
SECTION B-B



DETAIL "H"



TYPICAL CONNECTION
LATERAL CONNECTION OF 24" TRUSSES



SECTION H H

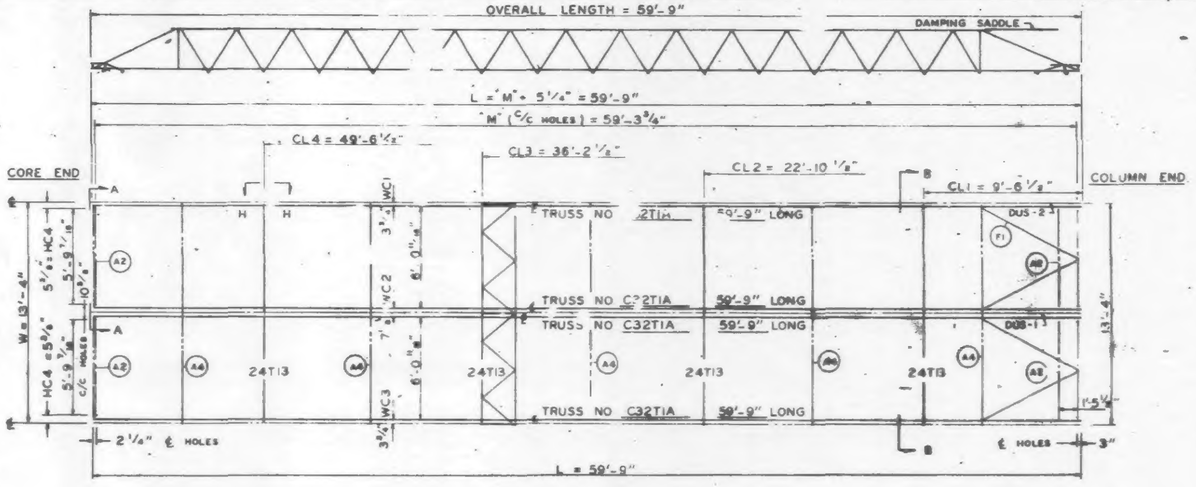
REF DRWG		
7-A84-3 & 3.1	1-3-68	
7-A84-15 & 16	1-3-68	
7-A84-39-42	1-3-68	
SA-124	10-20-67	
7-A83-2	1-3-68	
7-A81-2	8-15-68	
7-A82-8 & 8.1	2-15-68	

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH); 49-58, 60-66, 68
69 (NORTH) PANEL B1A - 13'-4" x 59'-9"

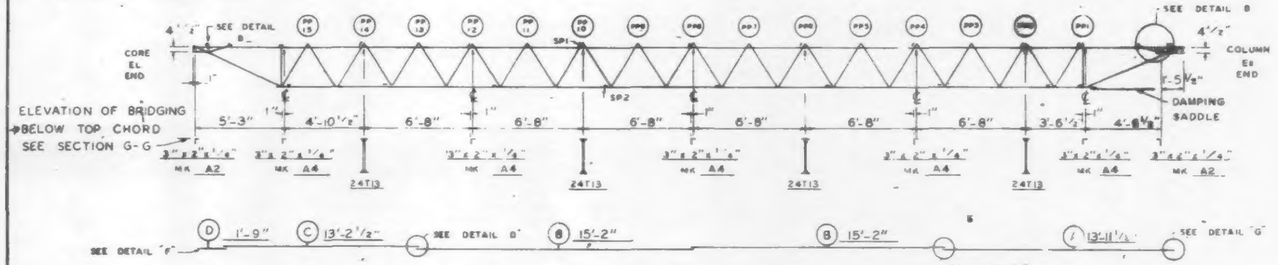
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-5 2-15-68 PLATE	
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.	DATE	DRAWN BY DATE FEB 24, 1968	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY A.B. RAHL DATE FEB 24, 1968	IN CHARGE OF [illegible]
LACLEDE STEEL CO. DETAILED BY A.C. WEBER		FABRICATION CONT. NO W.T.C. 221	SHEET NO FP B1A



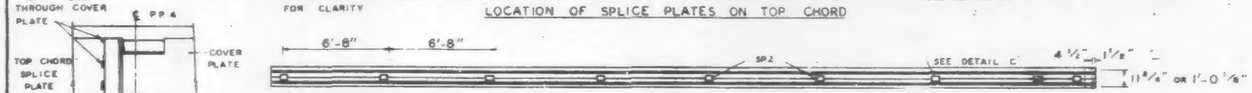
PANEL NO. B1A SIZE 13'-4" x 59'-9"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.



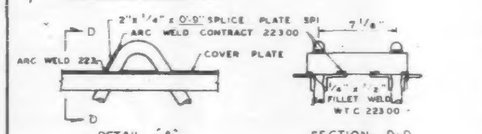
COVER PLATE PLACEMENT

LOCATION OF SPLICE PLATES ON TOP CHORD



LOCATION OF SPLICE PLATES ON BOTTOM CHORD

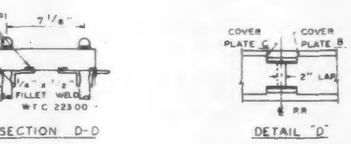
TOP VIEW - DETAIL "A"



DETAIL "A" SECTION D-D

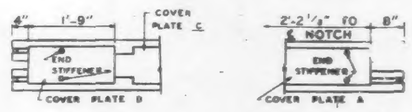
DETAIL "C" SECTION E-E

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1 4" x 1" FILLET WELDS



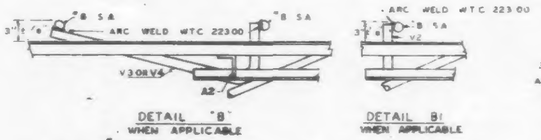
DETAIL "D" DETAIL "E"

COVER PLATES 28 GA THICK



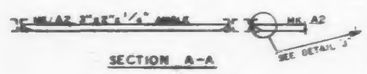
DETAIL "F" DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

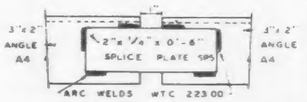


DETAIL "B" WHEN APPLICABLE

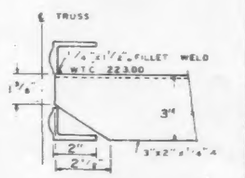
DETAIL B1 WHEN APPLICABLE



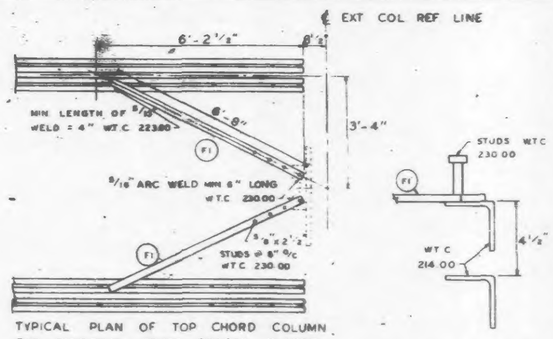
SECTION A-A END SUPPORT ANGLES



TYPICAL CONNECTION LATERAL CONNECTION OF 3"x2" ANGLES



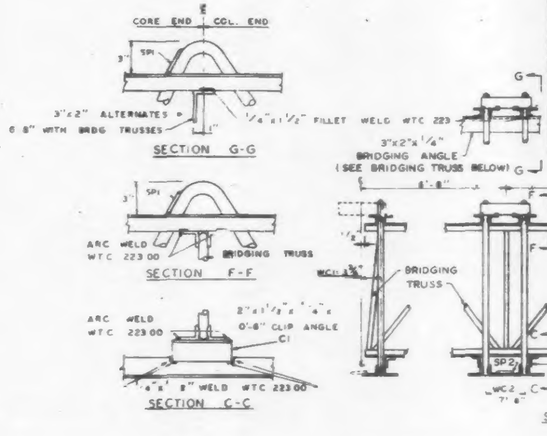
DETAIL "J" END SUPPORT ANGLE ATTACHMENT

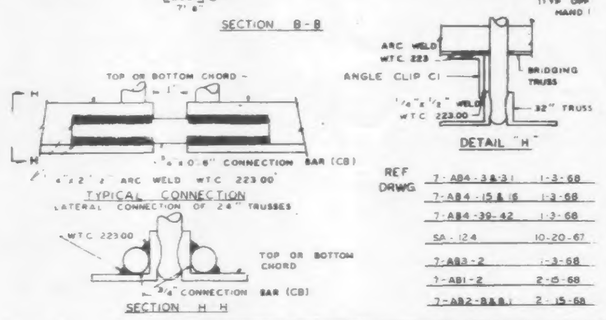


TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				REF DRWG.
MATERIAL	MK	PCS.	SIZE	
FLOOR TRUSSES	T1A	4	C32T1A - 59'-9"	ST201A
BRIDGING TRUSSES	T1B	4	3 - 18'-8"	ST 11
3"x2"x1/4" ANGLE	A2	4	3"x2"x1/4" x 11'-11 15/16"	ST400
	A4	5	3"x2"x1/4" x 13'-3"	ST400
DIAGONAL FLATS	F1	4	1 1/2"x 5/8"x 8'-8"	ST400
SPLICE PLATES	SP		2"x 1/4" x 0'-8"	CD201
	SP2	18	3"x 3/8"x 0'-4 1/2"	CD201
	SP5	5	2"x 1/4"x 0'-6"	CD201
COVER PLATES	A	2	9"x.0135"x 13'-11 1/2"	ST303
	B	4	8"x.0135"x 15'-2"	ST303
	C	2	8"x .0135" x 13'-2 1/2"	ST303
	D	2	8"x .0135" x 1'-9"	ST303
ANGLE CLIPS	C1	18	3"x2"x 1/4" x 0'-8"	CD201
℄ 8 SHEAR ANCHOR	SA	8	℄ 8 REBAR x 0'-9"	CD 201
DAMPING SADDLE	DUS-1	1	3 1/2"x3 1/2"x 3/8"x 3'-7 3/8"	ST298
	DUS-2	1	3 1/2"x3 1/2"x 3/8"x 3'-7 3/8"	ST298
CONNECTION BAR	CB	18	3/4"x 0'-9"	CD201





REF DRWG		
7-AB4-3 & 31	1-3-68	
7-AB4-15 & 16	1-3-68	
7-AB4-39-42	1-3-68	
SA-124	10-20-67	
7-AB3-2	1-3-68	
7-AB1-2	2-15-68	
7-AB2-8 & 8.1	2-15-68	

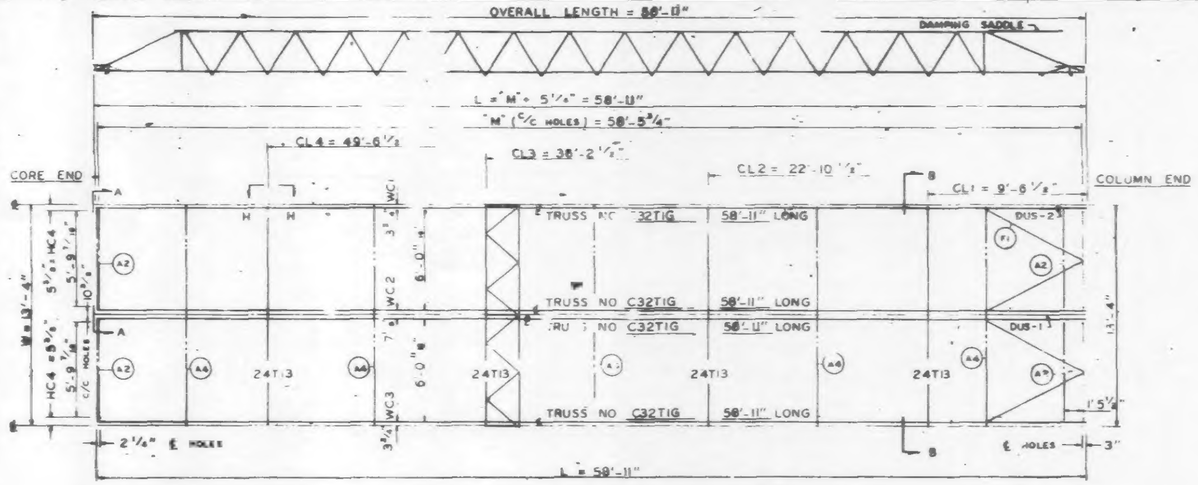
NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1 4" x 1" FILLET WELDS
A = 1/16" B = 1/16"

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH); 49-58, 60-66, 68
69 (NORTH) PANEL B1A - 13'-4" x 59'-9"

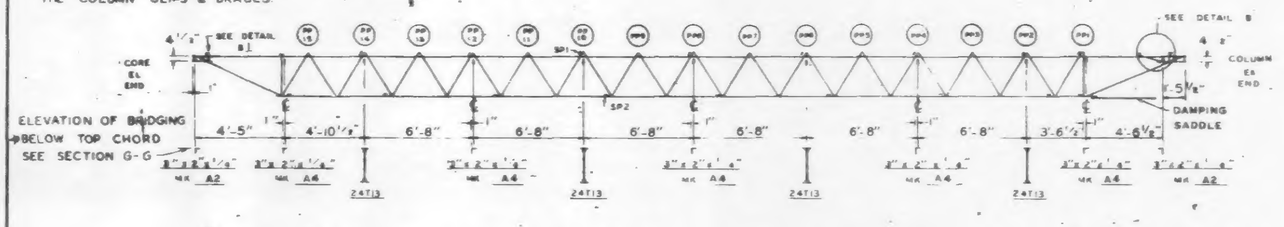
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-6 2-15-68 PLATE	
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.	DATE	DRAWN BY [illegible] DATE FEB 26, 1968	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY J.R.PAUL DATE FEB 26, 1968	IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO. DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP B1A



PANEL NO. BRIG SIZE 13'-4" x 58'-11"

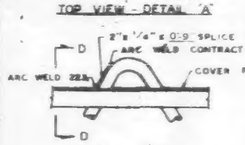
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.



COVER PLATE PLACEMENT

LOCATION OF SPLICE PLATES ON TOP CHORD

LOCATION OF SPLICE PLATES ON BOTTOM CHORD

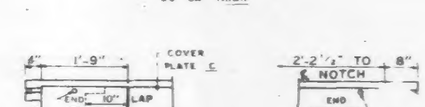


DETAIL "A" SECTION D-D

DETAIL "D" DETAIL "E"

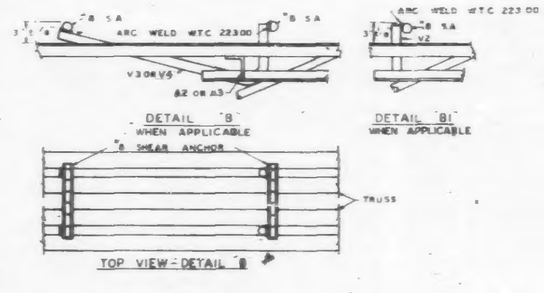
DETAIL "C" SECTION E-E

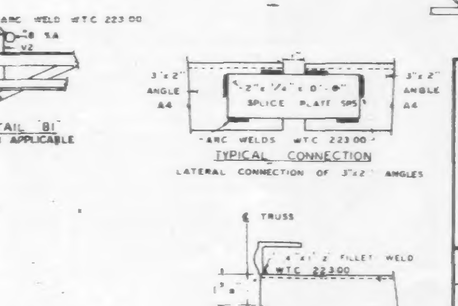
NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" FILLET WELDS

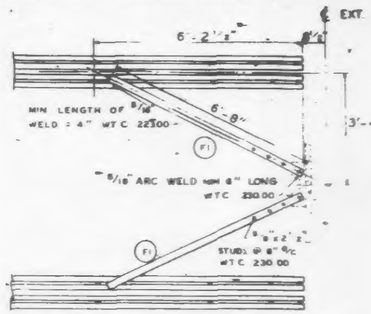


DETAIL "F" DETA "G"

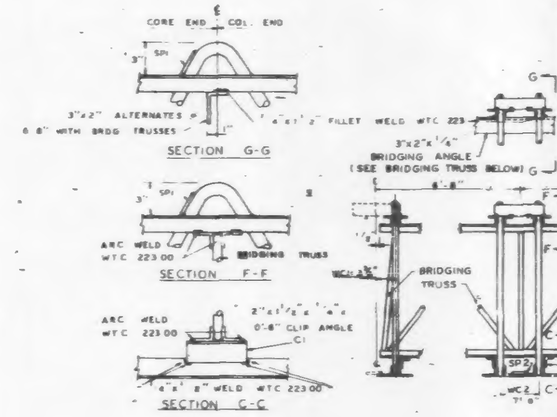
FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 22300

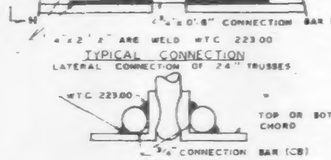






REQUIRED MATERIAL		QTY		MK DWG
MATERIAL	MK			
FLOOR TRUSSES	T13	4	C32TIG - 58'-11"	ST201G
BRIDGING TRUSSES	T13	4	T13 - 13'-4"	T211
3"x2"x1/4" ANGLE	A2	4	3"x2"x1/4" - 5'-11 3/16"	ST400
	A4	5	3"x2"x1/4" x 13'-5"	ST400
DIAGONAL FLATS	F1		1 1/2" x 5/16" x 6'-0"	ST400
SPLICE PLATES	SP1		2" x 1/4" x 0'-9"	CD201
	SP2	18	3" x 3/8" x 0'-4 1/2"	CD201
	SP5	5	2" x 1/4" x 0'-8"	CD201
COVER PLATES	A	2	9" x .0135" x 13'-11 1/2"	ST303
	B	4	9" x .0135" x 15'-2"	ST303
	C	2	9" x .0135" x 13'-2 1/2"	ST303
	D	2	9" x .0135" x 1'-9"	ST303
ANGLE CLIPS	C1	18	3"x2"x1/4" x 0'-8"	CD201
"B SHEAR ANCHOR	SA	6	"B REQD x 0'-8"	CD201
DAMPING SADDLE	DUS-1	1	3 1/2" x 3 1/2" x 5/8" x 3'-7 3/8"	ST298
	DUS-2	1	3 1/2" x 3 1/2" x 5/8" x 3'-7 3/8"	ST298
CONNECTION BAR	CB	18	3/4" W x 0'-9"	CD201





REF DRWG		
7-AB4-3 & 21	1-3-68	
7-AB4-15 & 18	1-3-68	
7-AB4-39-42	1-3-68	
SA-124	10-20-67	
7-AB3-2	1-3-68	
7-AB1-2	2-15-68	
7-AB2-B&B1	2-15-68	

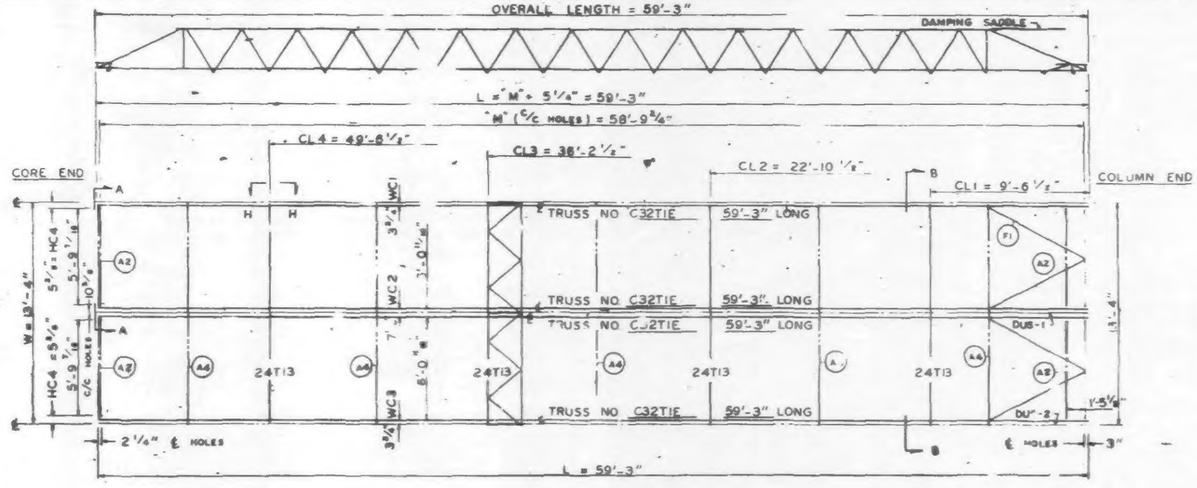
10 D

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10,11 & 39 (NORTH) 39 & 40 (SOUTH)
PANEL BRIG - 13'-4" x 58'-11"

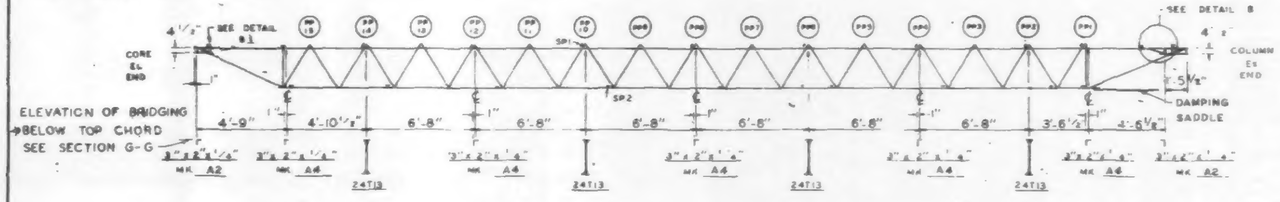
FABRICATION BY LACLEDE STEEL COMPANY

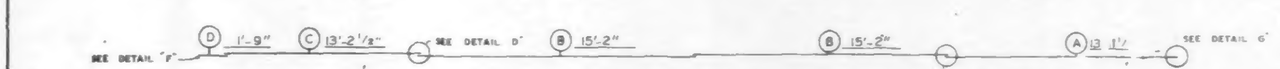
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-5 2-15-68 PLATE	
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.	DATE	DRAWN BY ____ DATE FEB 24, 1968	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY J.R.PAUL DATE FEB 24, 1968	IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO. DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP BRIG



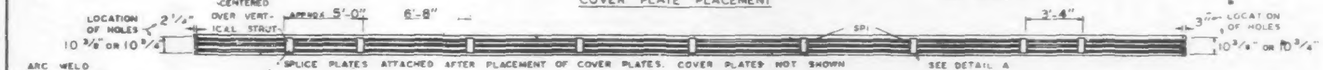
PANEL NO. BIE . SIZE 13'-4" x 59'-3"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.



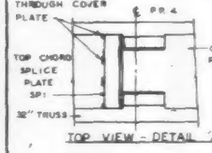


COVER PLATE PLACEMENT



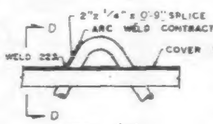
SPLICE PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

LOCATION OF SPLICE PLATES ON TOP CHORD

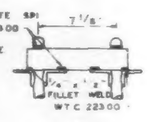


TOP VIEW - DETAIL "A"

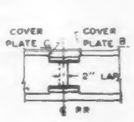
LOCATION OF SPLICE PLATES ON BOTTOM CHORD



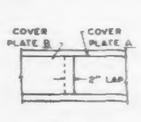
DETAIL "A"



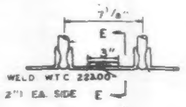
SECTION D-D



DETAIL "D"



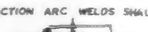
DETAIL "E"



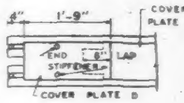
DETAIL "C"

SECTION E-E

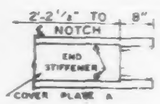
NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FILLET WELDS



COVER PLATES "20 GA THICK

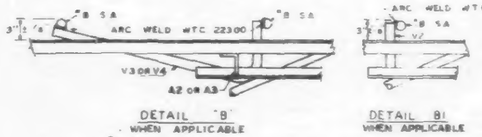


DETAIL "F"



DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C 223.00

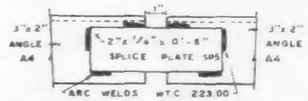


DETAIL "B"

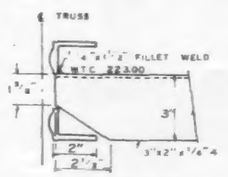
DETAIL B1
WHEN APPLICABLE

TOP VIEW - DETAIL "B"

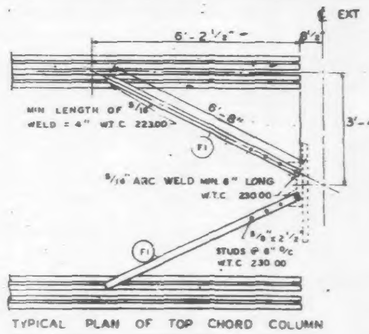
SECTION A-A
END SUPPORT ANGLES



TYPICAL CONNECTION
LATERAL CONNECTION OF 3"x2" ANGLES



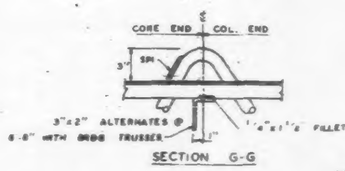
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



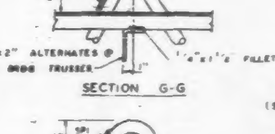
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

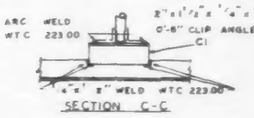
REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	TIE	4	C32TIE - 59'-3"	ST201E
BRIDGING TRUSSES	T13	4	= 3 - 13'-8"	ST211
3"x2"x1/4" ANGL		4	3"x2"x1/4"x 11 5/16"	ST400
	A4	5	3"x2"x [illegible] x 13'-3	ST400
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 8'-8	ST400
SPLICE PLATES	SP1		2"x 1/4" x 0'-9"	CD201
	SP2	18	3"x 3/8" x 0'-4 1/2"	CD201
	SP5	5	2"x 1/4" x 0'-6"	CD201
COVER PLATES	A	2	9"x.0135"x 13'-11 1/2"	ST303
	B	4	9"x.0135" x 13'-2"	ST303
	C	2	9" x .0135" x 13' 2 1/2"	ST303
	D	2	8" x .0135" x 1'-9"	ST303
ANGLE CLIPS	C1	18	3"x2"x 1/16" x 0'-6"	CD201
"B SHEAR ANCHOR	SA	6	"B SHEAR x 0'-0"	CD 201
DAMPING - SADDLE	DUS-1	1	3 1/2"x3 1/2"x 3/16"x 2'-7 7/8"	ST298
	DUS-2	1	3 1/2"x3 1/2"x 3/8"x 2'-7 7/8"	ST298
CONNECTION BAR	CB	16	3/8" 9 x 0'-9"	CD201



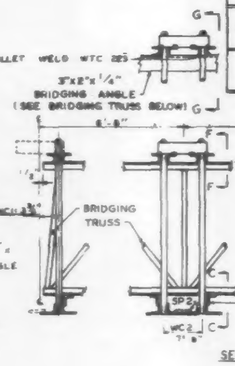
SECTION G-G



SECTION F-F

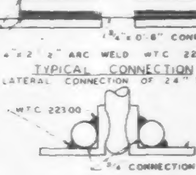


SECTION C-C

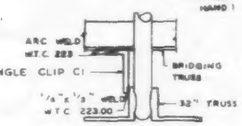


SECTION B-B

TYPICAL CONNECTION
LATERAL CONNECTION OF 24" TRUSSES



SECTION H-H



DETAIL "M"

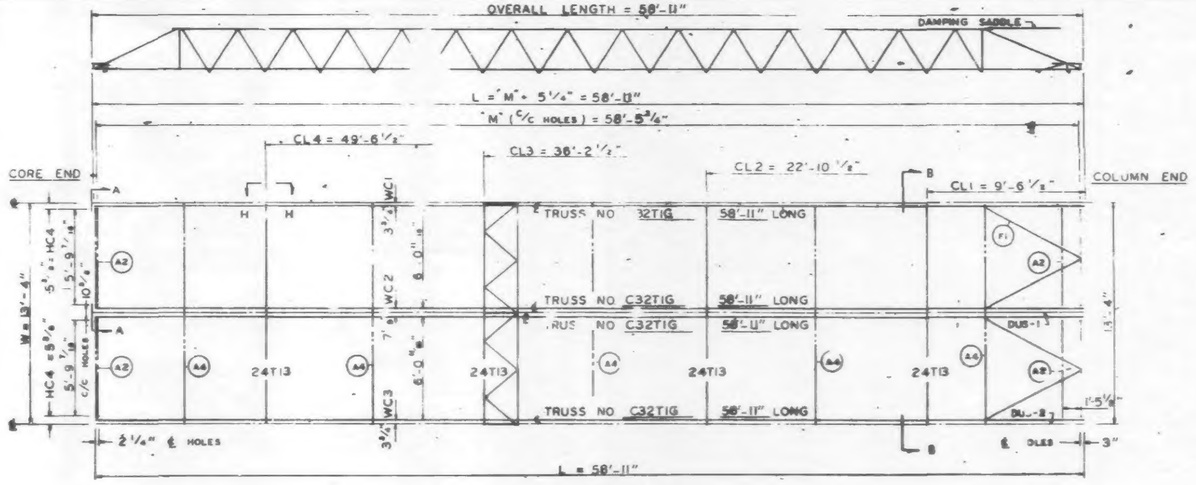
REF DRWG		
7-AB4 3 & 31	3-68
7-AB4-15 & 16	3-68
7-AB4-39-42	3-68
SA-124	10-20-67
7-AB2-2	1-3-68
7-AB1-2	2-15-68
7-AB2-BAR1	2-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11 (NORTH & SOUTH)

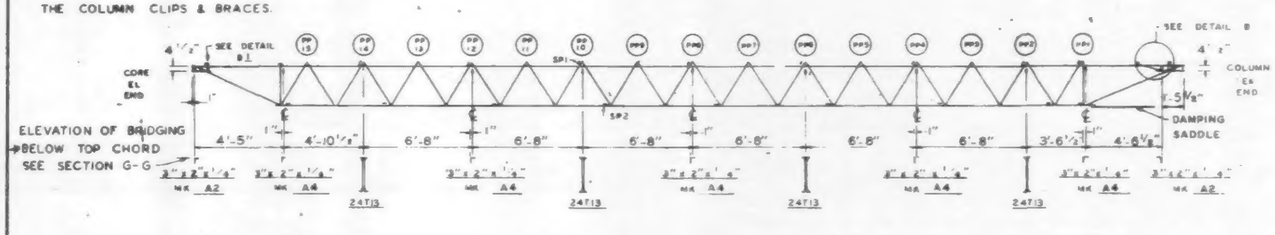
PANEL BIE - 13'-4" x 59'-3"

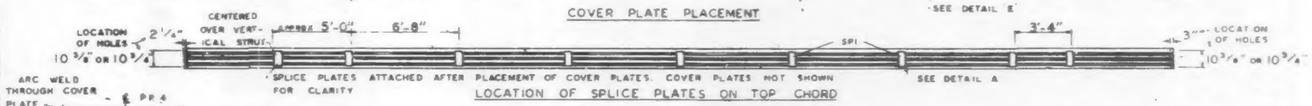
FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING 7-AB3-5 2-15-68	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.N.J.	DATE	DRAWN BY DATE FEB 24, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY A.D. DATE FEB 24, 1968	NO CHANGES OF ANY KIND
LACLEDE STEEL CO. DETAILED BY A.C. DATE		FABRICATION CONT. NO. W.T.C. 221	SHEET NO D-1 E

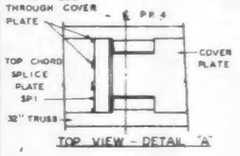


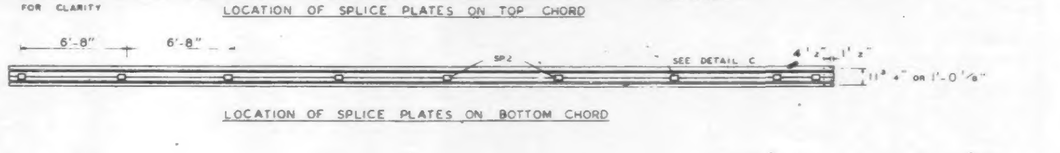
PANEL NO. BIG SIZE 13'-4" x 58'-11"

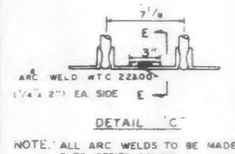
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

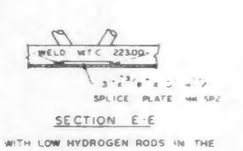


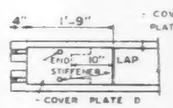


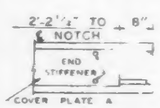




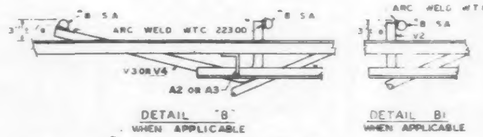


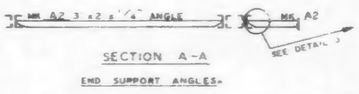


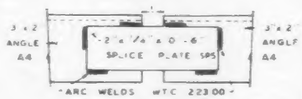


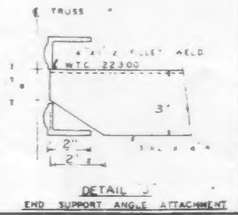


FIELD PUNCH COVER PLATES OVER END STIFFENERS @ WTC 223.00

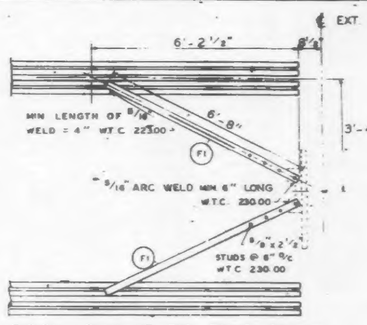




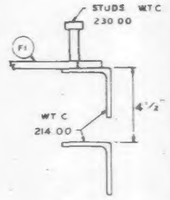




NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" FILLET WELDS

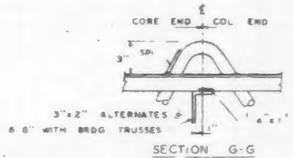


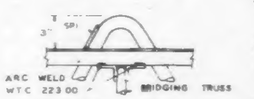
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

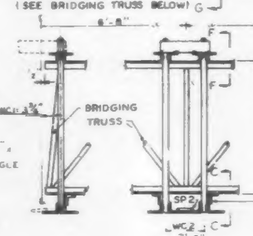


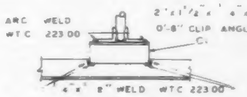
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN - CLIPS FOR TRUSS BEARING

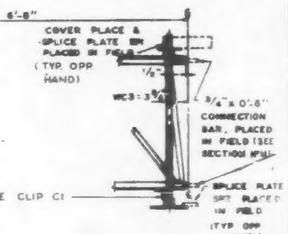
REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	SEE DWG.
FLOOR TRUSSES	T1G	4	C32T1G - 58'-11"	ST201G
BRIDGING TRUSSES	T13	4	2" - 13'-8 1/2"	ST211
3"x2"x1/4" ANGL		4	3"x2"x1/4"x5'-11" LG	ST400
	A4	5	3"x2"x [illegible] x 13'-3"	ST400
DIAGONAL FLATS	F1	4	1 1/8"x 5/8"x 6'-8"	ST400
SPLICE PLATES	SP1		2"x1/4"x 0'-9"	CD201
	SP2	18	3"x 3/8"x 0'-4 1/2"	CD201
	SP3	5	2"x 1/4"x 0'-6"	CD201
COVER PLATES	A	2	9"x.0135"x 13'-11 1/2"	ST303
	B	4	9"x.0135" x 13'-2"	ST303
	C	2	9"x .035" x 13'-2 1/2"	ST303
	D	2	9" x .035" x 1'-9"	ST303
ANGLE CLIPS	C1	18	3"x2"x1/4"x 0'-6"	CD201
3/4" ℄ SHEAR ANCHOR	SA	6	3/4" ℄ REQ'D x 0'-9"	CD201
DAMPING SADDLE	DUS-1	1	3 1/2"x3 1/2"x 5/8"x 3'-7 5/8"	ST298
	DUS-2	1	3 1/2"x3 1/2"x 5/8"x 3'-7 5/8"	ST298
CONNECTION BAR	CB	18	3/4"℄ x 0'-9"	CD201

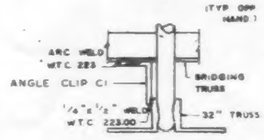












REF DWG.		
7-AB4-3 & 21	1-3-68	
7-AB4-15 & 18	1-3-68	
7-AB4-39-42	1-3-68	
SA-124	10-20-67	
7-AB3-2	1-3-68	
7-AB1-2	2-15-68	
7-AB2-6 & 8.1	2-15-68	

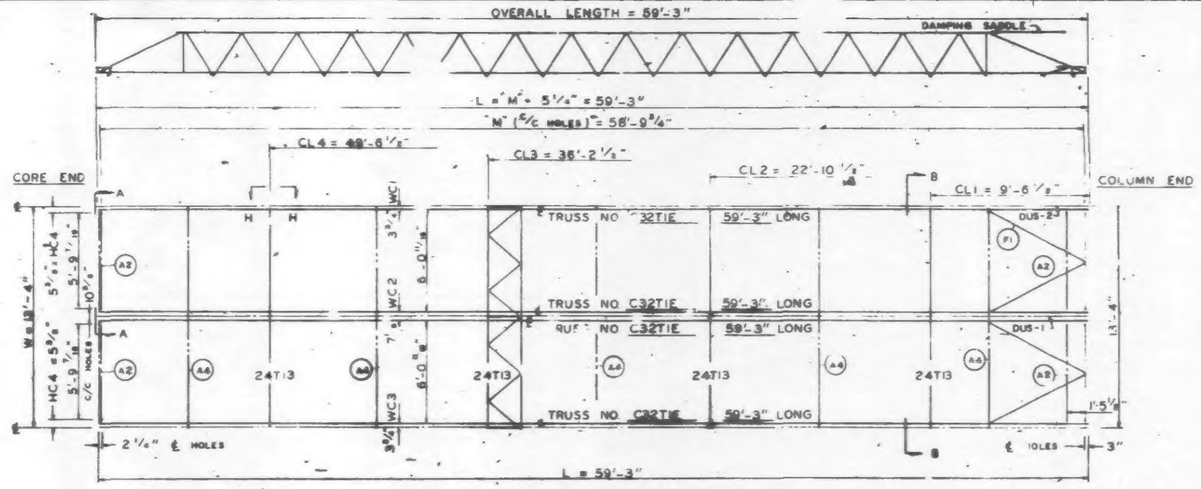
VOID

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 39 & 40 (NORTH & SOUTH)

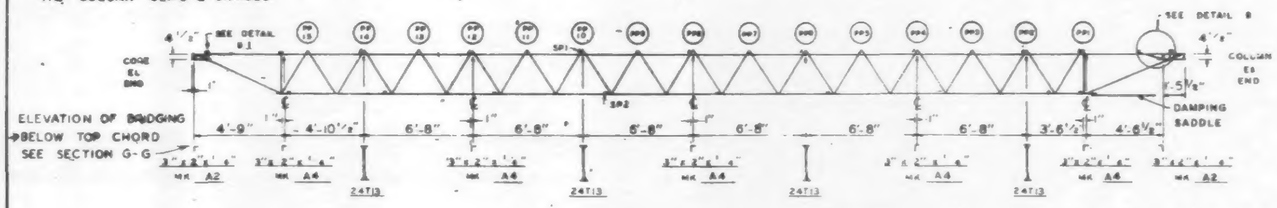
PANEL BIG - 13'-4" x 58'-11"

FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB2-5 2-15-68	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.	DATE	DRAWN BY [illegible] DATE FEB 24, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY J.R. PAUL DATE FEB 24, 1968	IN CHARGE OF PROD DEV
LACLEDE STEEL CO. DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP BIG



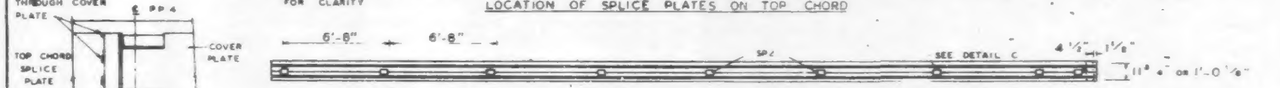
PANEL NO. BRIE SIZE 13'-4" x 59'-3"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

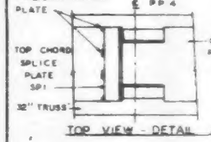


COVER PLATE PLACEMENT

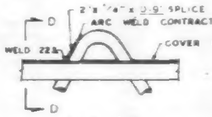
LOCATION OF SPLICE PLATES ON TOP CHORD



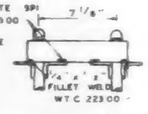
LOCATION OF SPLICE PLATES ON BOTTOM CHORD



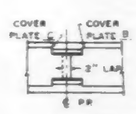
TOP VIEW - DETAIL A



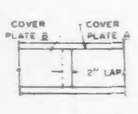
DETAIL "A"



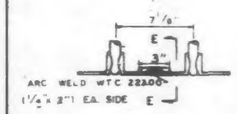
SECTION D-D



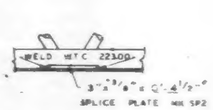
DETAIL "D"



DETAIL "E"

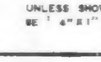


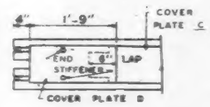
DETAIL "C"



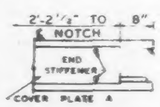
SECTION E-E

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE. ALL CONNECTION ARC WELDS SHALL BE 1/4" FILLET WELDS





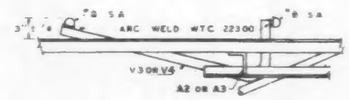
DETAIL "F"



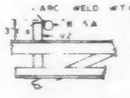
DETAIL "G"

COVER PLATES 20 GA THICK

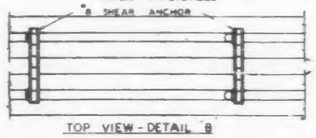
FIELD PUNCH COVER PLATES OVER END STIFFENERS WT C 223.00



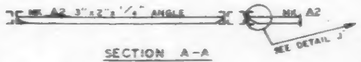
DETAIL "B" WHEN APPLICABLE



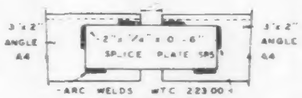
DETAIL B1 WHEN APPLICABLE



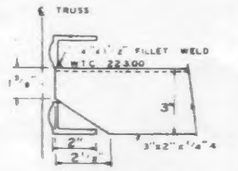
TOP VIEW - DETAIL B



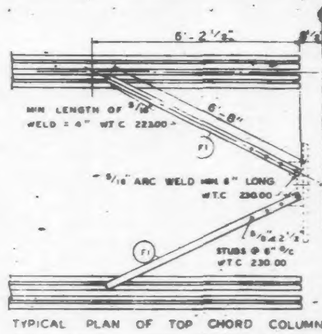
SECTION A-A
END SUPPORT ANGLES



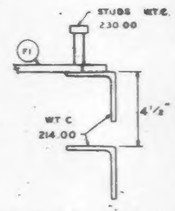
TYPICAL CONNECTION
LATERAL CONNECTION OF 3"x2" ANGLES



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

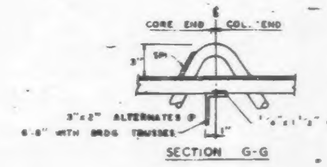


TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

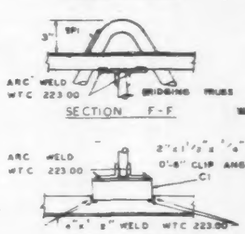


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING

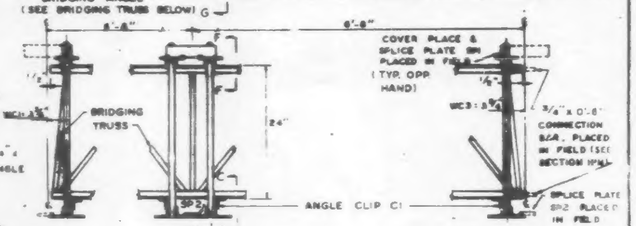
REQUIRED MATERIAL FOR [illegible]				ALT DRWG
MATERIAL	MK	PCS		
FLOOR TRUSSES	TIE	4	C32TIE - 59'-3"	ST201E
BRIDGING TRUSSES	T13	4	T13 - 18'-3"	ST211
3"x2"x1/4" ANG.	...	4	3"x2"x1/4" - 11 11/16	ST400
	A4	5	3"x2" 4 x 13'-2	ST400
DIAGONAL FLATS	F1		1 1/2"x 3/8"x 6'-"	ST400
SPLICE PLATES	SP1		2"x 1/4"x 0'-9"	CD201
	SP2	18	3"x 3/8"x 0'-4 1/2"	CD201
	SP5	5	2"x 1/4"x 0'-8"	CD201
COVER PLATES	A	2	6"x .0135"x 18'-11 1/2"	ST303
	B	4	8"x .0135"x 13'-2"	ST303
	C	2	6"x .0135" x 13'-2 1/2"	ST303
	D	2	6"x .0135" x 1'-9"	ST303
ANGLE CLIPS	C1	18	3"x2"x 5/16"x 0'-6"	CD201
"B SHEAR ANCHOR	SA	6	"B SHEAR x 0'-8"	CD201
DAMPING SADDLE	DUS-1	1	3 1/2"x 3 1/2"x 8/16"x 3'-7 9/16"	ST298
	DUS-2	1	3 1/2"x 3 1/2"x 8/16"x 3'-7 9/16"	ST298
CONNECTION BAR	CB	18	3/4"B x 0'-8"	CD201

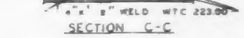


SECTION G-G



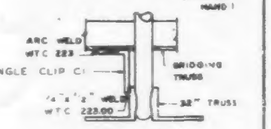
SECTION F-F



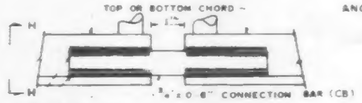


SECTION C-C

SECTION B-B



DETAIL "H"



TYPICAL CONNECTION
LATERAL CONNECTION OF 24" TRUSSES

SECTION H-H

REF DRWG		
7 AB4 3 & 31	1-3-68	
7-AB4-15 & 16	1-3-68	
7-AB4-39-42	1-3-68	
SA-.24	10-20-67	
7-AB3-2	1-3-68	
7-AB1-2	2-15-68	
7-AB2, 8A8.1	2-15-68	

VOID

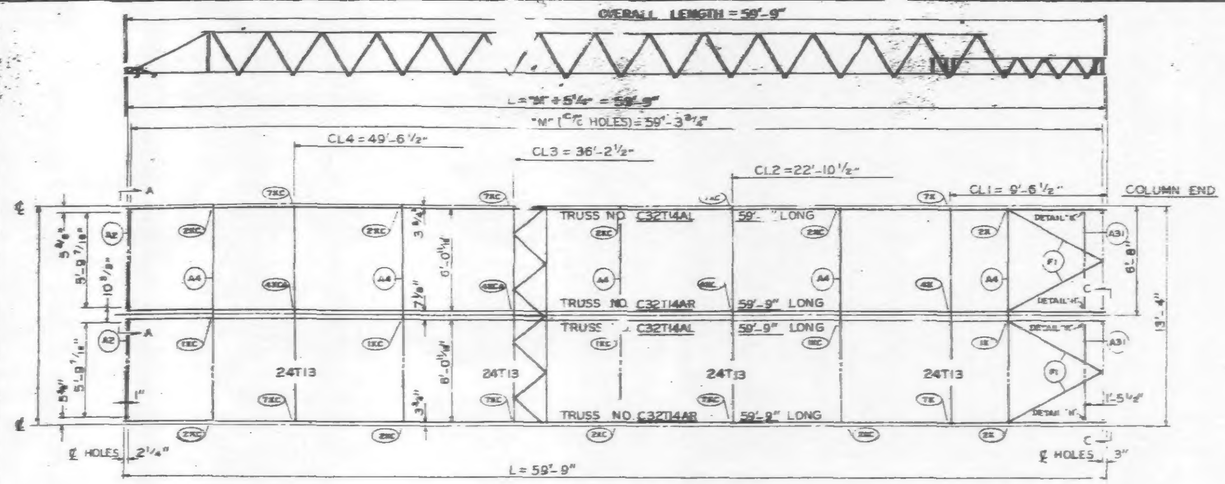
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-11 (SOUTH)

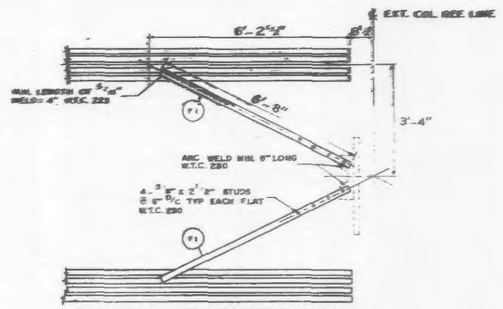
PANEL BRIE - 13'-4" x 59'-3"

FABRICATION BY LACLEDE STEEL COMPANY

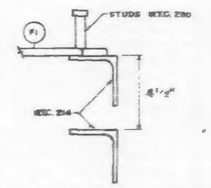
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-5 2-15-68 PLATE	
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.	DATE	DRAWN BY [illegible] DATE FEB 26, 1968	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY J.R. PAUL DATE FEB 26, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY A.C. REINER	LACLEDE STEEL CO.	FABRICATION CONT. NO W.T.C. 221	SHEET NO SP-BRIE



PANEL NO. B2A SIZE 13'-4" x 59'-9"



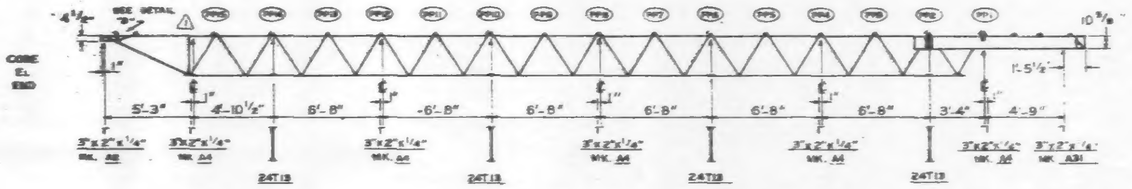
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



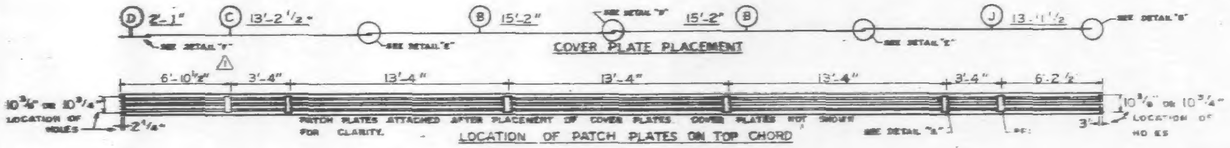
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES		2	C32T14AL x 59'-9"	ST 2XXL
		2	C32T14AR x 59'-9"	ST 2XXL
BRIDGING TRUSSES	T13	4	24T13 x -3"	ST 213
3"x 2" x 1/4" ANGLE	A2	2	3"x2"x1/4"x5'-11 5/8"	ST 403
	A4	5	3"x2"x1/4"x -3"	ST 403
	A31	2	3"x2"x1/4"x -8 1/8"	ST 410
CLOSURE PLATES	PF-11	2	3" x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	4	1 1/2" x 3/8" x 6'-8"	ST 402
PATCH PLATE	PP1	12	2" x 1/4" x 0'-2"	ST 400
	PP2	12	3" x 3/8" x 0'-9"	ST 400
COVER PLATES	B	4	9"x.0135"x 15'-2"	ST 203
	C	2	9"x.0135"x 13'-2 1/2"	ST 203
	D	2	9"x.0135"x 2'-1"	ST 203
	J	2	9"x.0135"x 13'-11 1/2"	ST 204
ANGLE CLIPS	C1	16	2" x 1 1/2" x .25" x 6"	ST 400
"B SHEAR ANCHOR	SA2	4	"B REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" B x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .38" x 0'-9"	ST 400
	P3	4	4 1/2" x .38" x 1'-8"	ST 400
	P8	4	3" x 1/2" x 1'-2"	ST 409

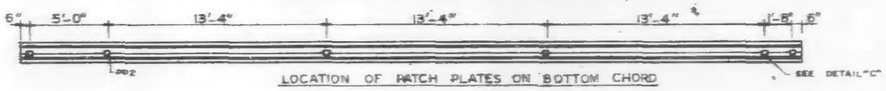
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (12).
ALL CONNECTION DETAILS FOR FLOORS 25, 50 & 52 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x 1/4" FULL THROAT FILLET.



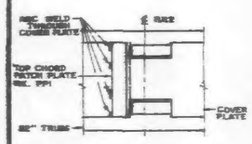
COVER PLATE PLACEMENT



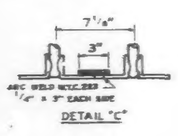
LOCATION OF PATCH PLATES ON TOP CHORD



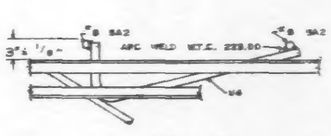
LOCATION OF PATCH PLATES ON BOTTOM CHORD



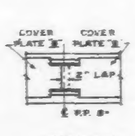
TOP VIEW - DETAIL "A"



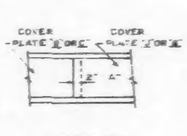
DETAIL "C"



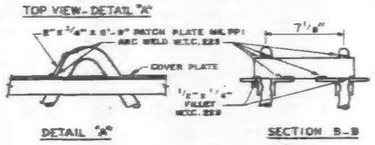
DETAIL "B"



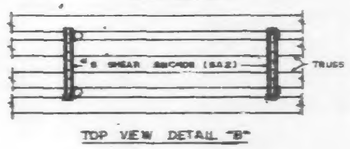
DETAIL "D"



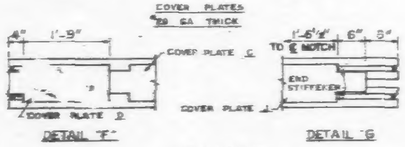
DETAIL "E"



DETAIL "A" SECTION B-B

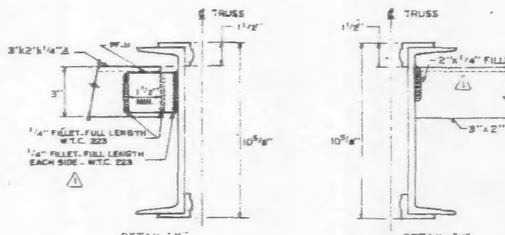


TOP VIEW DETAIL "B"



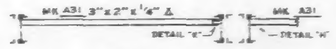
DETAIL "F" DETAIL "G"

FIELD PUNCH COVER PLATES OVER END SUPPORTS W.T.C. 223.80

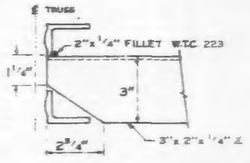


DETAIL "K" END SUPPORT ANGLE ATTACHMENT

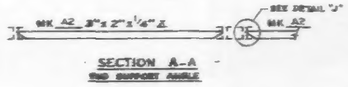
DETAIL "H" END SUPPORT ANGLE ATTACHMENT



SECTION C-C
END SUPPORT ANGLE



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

NO.	DATE	REVISION	BY
1	2-4-69	AS NOTED	EDC

REF DRWG.

7-AB3-28	10-4-68
7-AB1-13	10-4-68
7-AB2-8	7-22-68
7-AB4-28	7-22-68
SA-104	10-11-68
7-AB3-24	8-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)

PANEL B2A-13'-4" x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-AB3-28 PLATE

APPROVED FOR FABRICATION FOR P.O.N.Y.N.J. DATE 2/26/69

DRAWN BY L.H.B. DATE DEC. 5, 1968

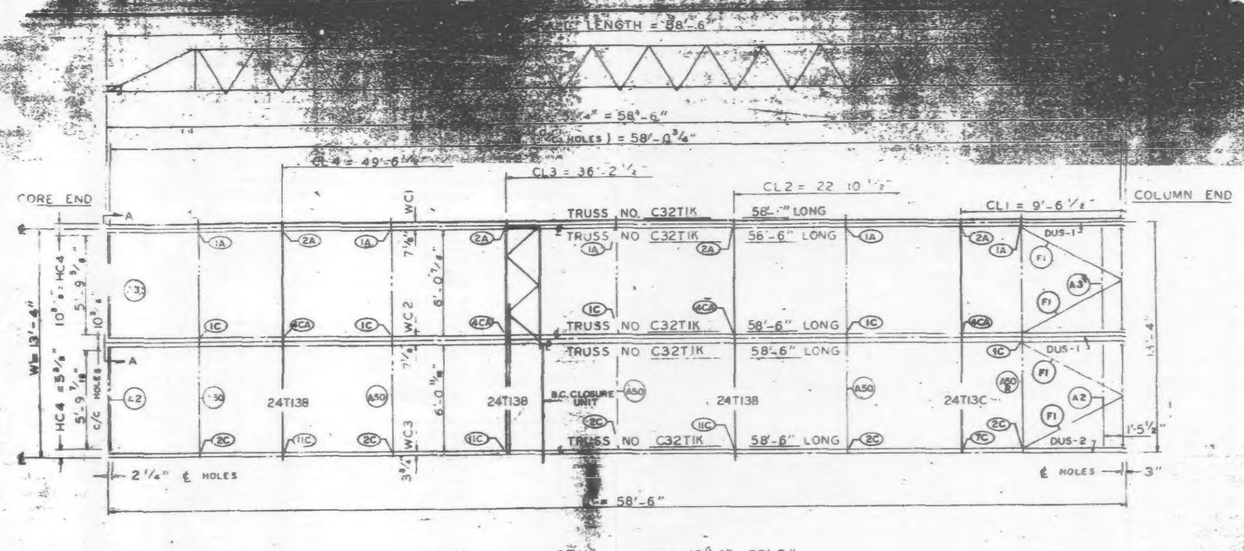
APPROVED FOR FABRICATION BY DATE

CHECKED BY T.N. CHUNG DATE DEC. 5, 1968

DETAILED BY

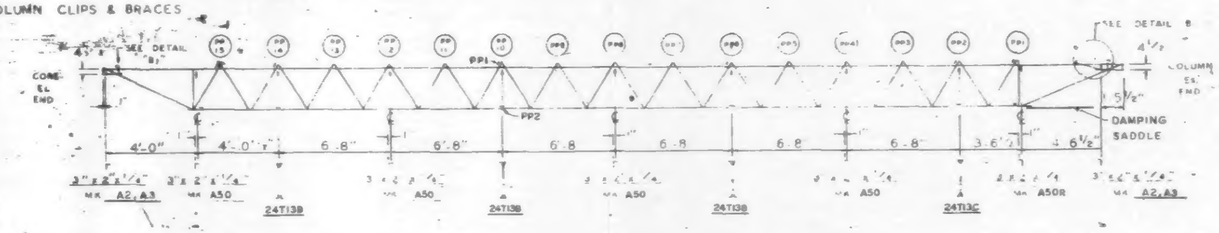
FABRICATION CODE NO. W.T.C. 22

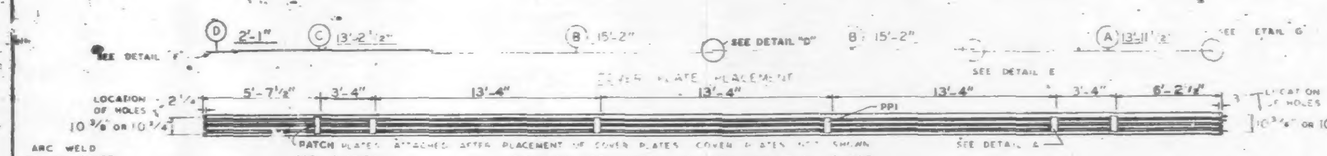
PROJECT NO. FP 82A



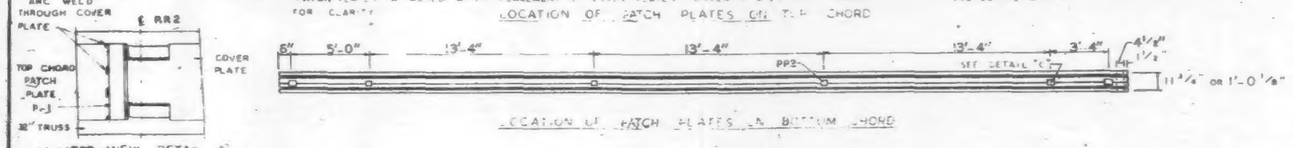
PANEL NO. C7K SIZE 13'-4" x 58'-6"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES



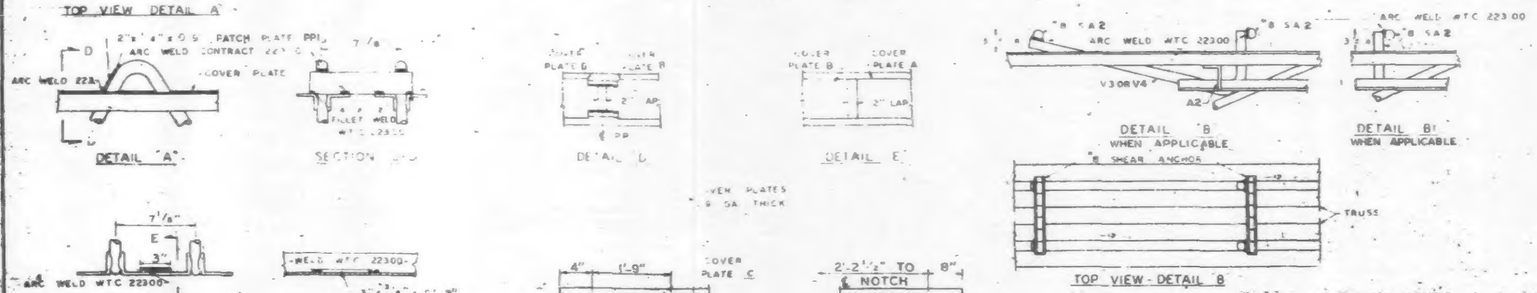


LOCATION OF PATCH PLATES ON TOP CHORD

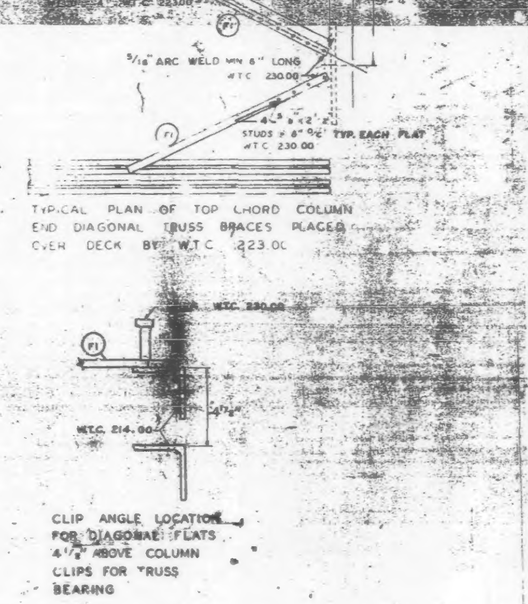


LOCATION OF PATCH PLATES IN BOTTOM CHORD

TOP VIEW DETAIL A



NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" FILLET.
1" A = 1/16" B = 1/4" FULL THROAT



3"x2"x1/4" ANGLE	T13C	1		
	A2	2	3"x2"x1/4"x5'-11 1/8"	ST403
	A3	2	3"x2"x1/4"x5'-11 1/2"	ST403
	A50	8	3"x2"x1/4"x0'-11 1/2"	ST 415
	A50R	1		
DIAGONAL FLATS	F1	4	1/4" x 8" x 8'-6"	ST402
PATCH PLATES	PP1	18	2"x 4"x 0'-5"	ST 400
	PP2	8	3"x 8"x 0'-3"	ST 400
COVER PLATES	A	1	9"x .135" x 13'-8 1/2"	ST308
	B	6	9"x .135" x 13'-2"	ST308
	C	3	9"x .135" x 13'-2 1/2"	ST303
	D*	3	9" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	13	2"x 2"x 1/4"x 0'-8"	ST 400
3/8" ℄ SHEAR ANCHOR	SA2	8	3/8" ℄ SHEAR ANCHOR x 0'-8"	ST 400
			2"x 2"x 1/4"x 1'-0 1/8"	ST
			2"x 2"x 1/4"x 0'-6 1/8"	ST
CONNECTION PLATE	CP1	8	1/4" x 3"x 0'-3"	ST 400
CONNECTION PLATES	P1	5	3/8" x 3" x 0'-11"	ST 400
	P2	4	3/8" x 3" x 0'-10"	ST 400
	P3	1	3/8" x 3" x 1'-0"	ST 400
	P16	4	3"x 1"x 0'-11"	ST 416
CLOSURE UNIT	BC	3	1'/8" ⌀ 8'-8 1/2" TUBE	BT 2138

NUMBERS AND LETTERS IN ELLIPSES ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 204 OR CD 229.

NO.	DATE	REVISION	BY

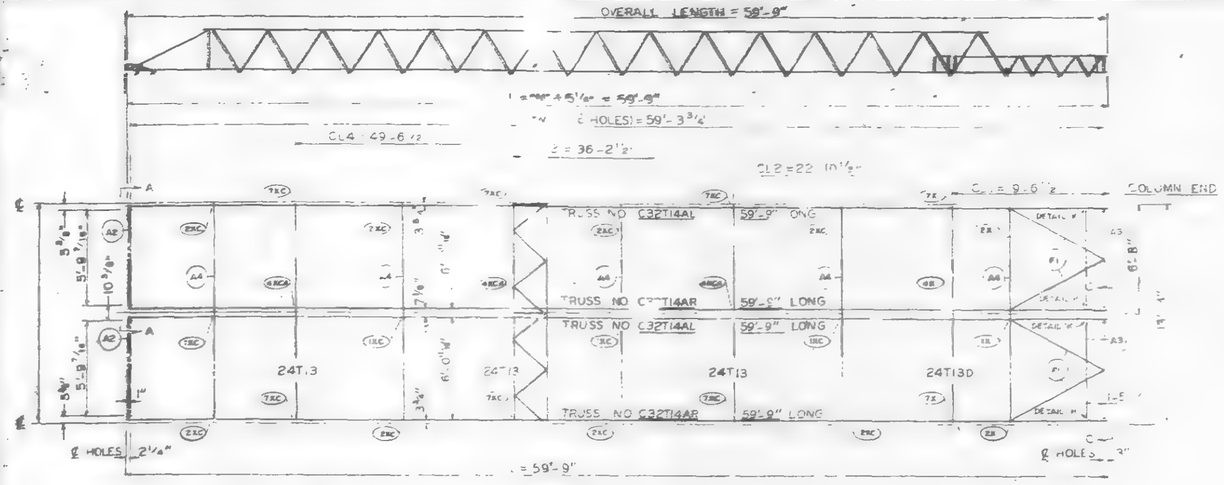
REF. DRWG		
7-AB4-15.1	10-6-68	
7-AB4-15 & 19	7-22-68	
7-AB4-42	10-15-68	
SA-124	1-8-69	
7-AB3-7a	10-15-68	
7-AB1-24	1-8-69	
7-AB2-8	7-22-68	

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

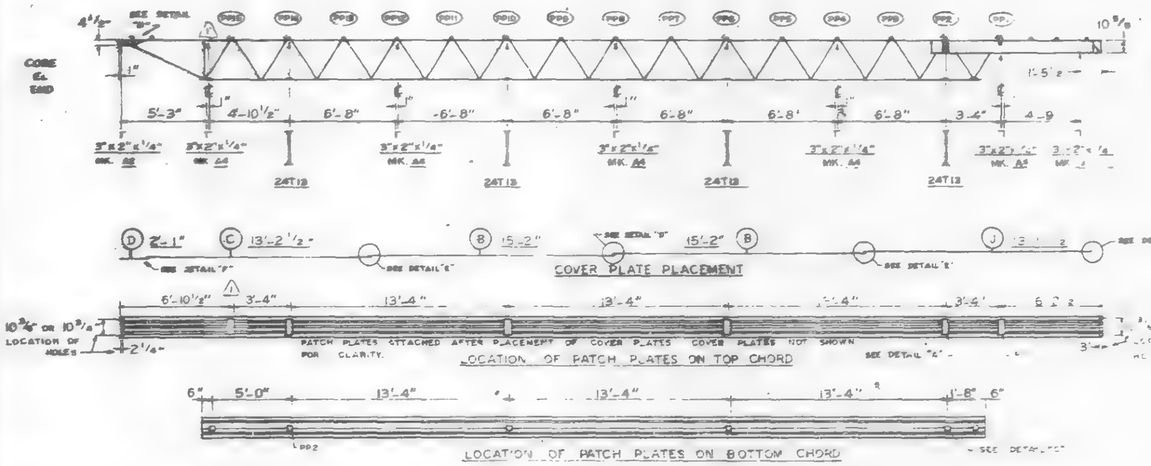
BLDG. 6 FLOORS 45 (WEST)

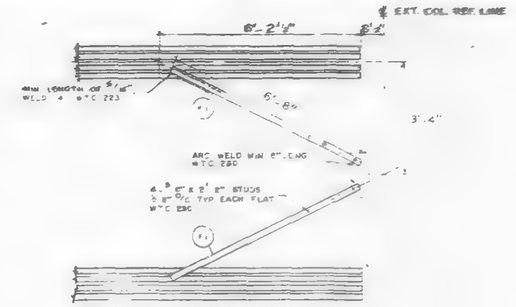
PANEL C7K - 13'-4" x 58'-6"

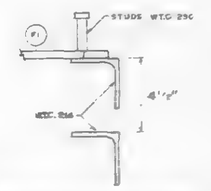
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. DATE 10/69
APPROVED FOR FABRICATION BY FOR FABRICATION DATE
DETAILED BY LACLEDE STEEL CO.
SHOP DRAWING NO. 13-79
DRAWN BY DATE JULY 1, 1969
CHECKED BY T.M.CHIRA DATE JULY 1, 1969
SHEET NO. OF
FLOOR C7K



PANEL NO. BR2A SIZE 13'-4" x 59'-9"



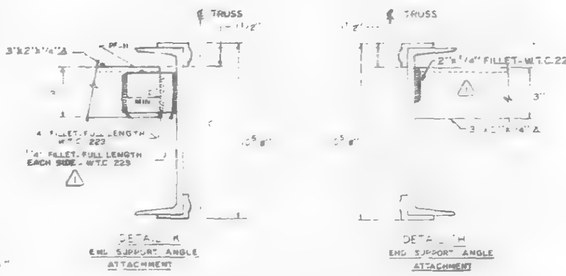




CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T-AAL	2	C32TI4AAL x 59'-9"	ST 214AL
	T-AAR	2	C32TI4AAR x 59'-9"	ST 214
BRIDGING TRUSSES	T13	-	24"I3 x 13'-9"	ST 213
	T13D	1	24"I3D 13'-3"	ST 213D
3"x 2"x 1/4" ANGLE	A2	2	3"x2"x1/4"x 5'-11 3/4"	ST 403
	5		3"x2"x1/4"x 4'-1"	ST 403
	A3	2	3"x2"x 4'-1"	ST 410
CLOSURE PLATES	PC1	2	3"x 4" x 0'-2 3/4"	ST 4 2
DIAGONAL FLATS	F1	4	3" x 5'-6" x 6'-8"	ST 402
PATCH PLATES	P1	2	2" x 1/4" x 0'-9"	ST 400
	PP2	2	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	4	9"x .0135" x 15'-2"	ST 303
	C	2	9"x .0135" x 13'-2 1/8"	ST 303
	D	2	9"x .0135" x 2'-1"	ST 303
	J	2	9"x .0135" x 13'-11 7/8"	ST 304
ANGLE CLIPS	C1	15	2"x1 1/2"x.25"x 6"	ST 400
ø8 SHEAR ANCHOR	SA2	4	ø8 REBAR x 0'-8"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2"x3"x0'-8 1/2"	ST 400
	P2	4	4 1/2"x.39"x0'-8"	ST 400
	P3	4	4 1/2"x.39"x1'-0"	ST 400
	P8	4	3"x1 1/2"x1'-2"	ST 408

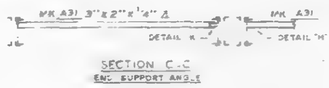
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS. e.g. (D)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 62 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.



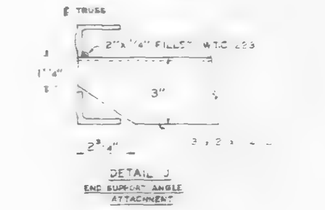
NO	DATE	REVISION	BY
1	2-6-69	AS NOTED	EDC

REF DRWG.

7-AB3-27	10-4-68
7-AB1- 3	10-4-68
7-AB2-8	7-22-68
7-AB4-28	7-22-68
SA-124	10-11-66
7-AB3- 24	8-15-68

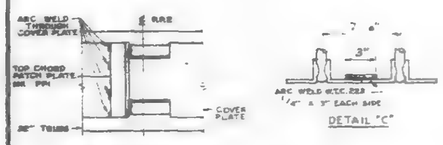


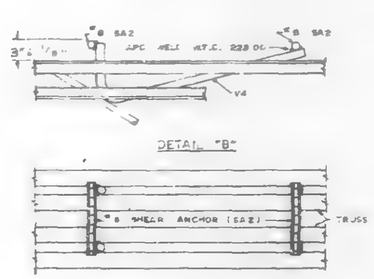
SECTION C-C
END SUPPORT ANGLE

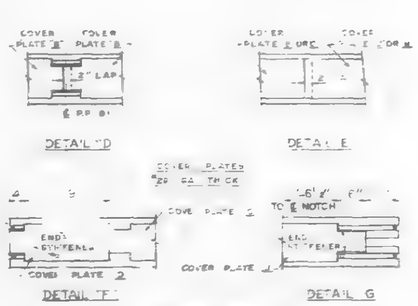


DETAIL J
END SUPPORT ANGLE ATTACHMENT

SECTION A-A
END SUPPORT ANGLE





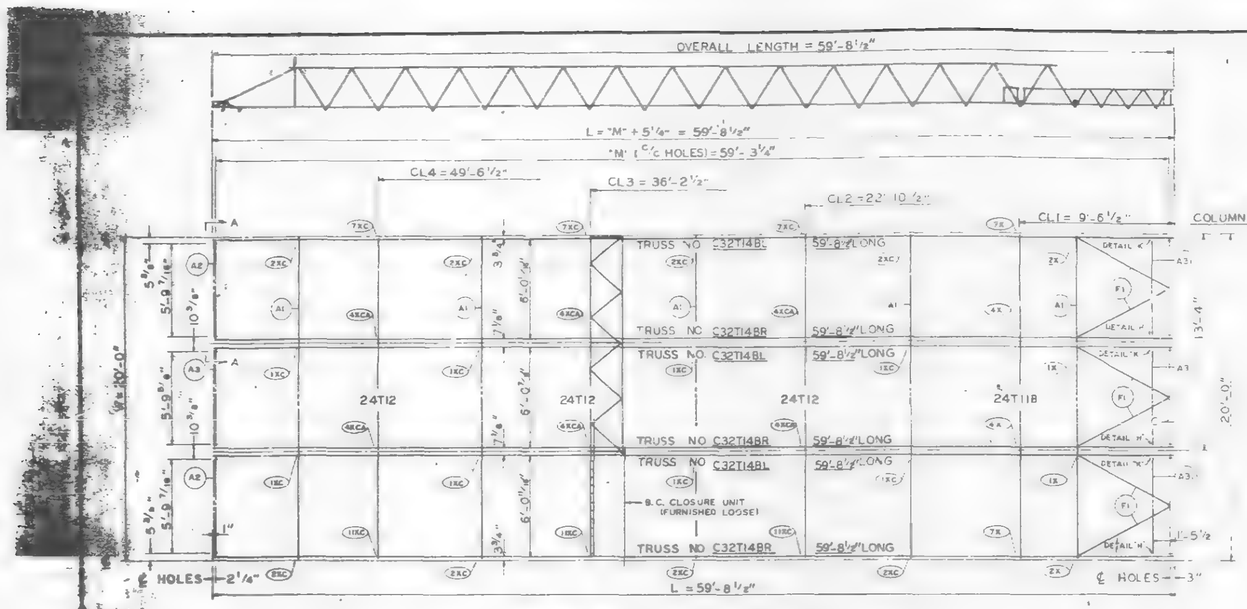


FABRICATION BY	LACLEDE STEEL COMPANY		
FABRICATED AT	MADISON, ILLINOIS	DESIGN DRAWING NO	7-AB2-27 PLATE
APPROVED FOR FABRICATION BY	DATE	DRAWN BY	DATE DEC. 5, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY	DATE DEC. 5, 1968
DETAILED		FABRICATION CONT NO W.T.C.	221

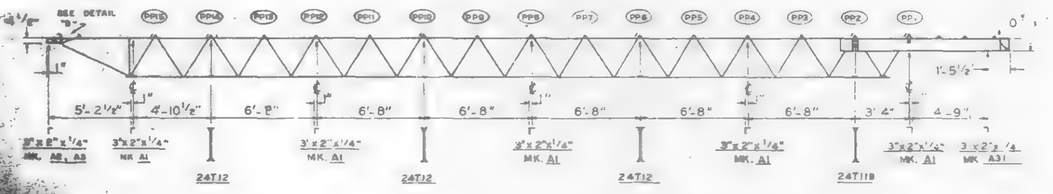
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

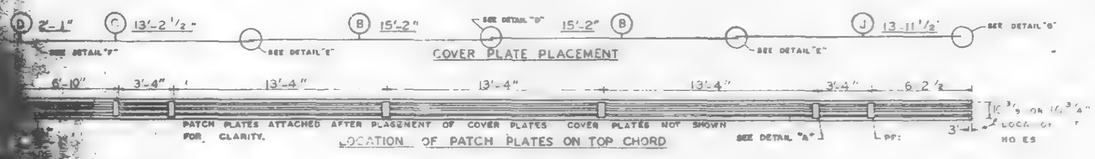
BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)

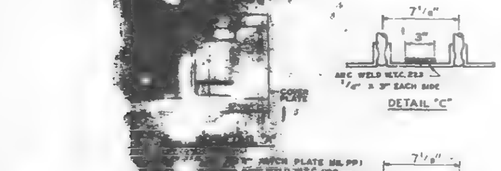
PANEL BR2A-13'-4" x 59'-9"

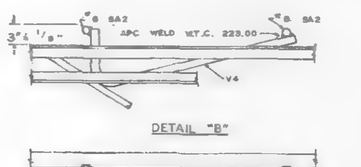


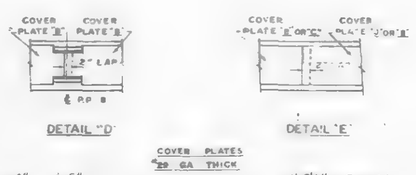
PANEL NO. C2B SIZE 20' x 59'-8 1/2"

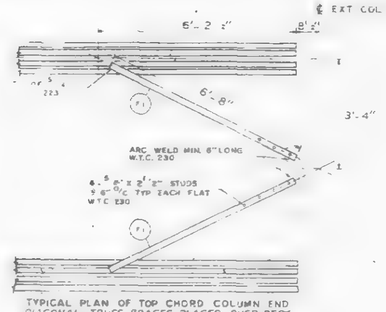




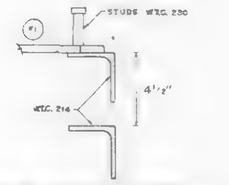








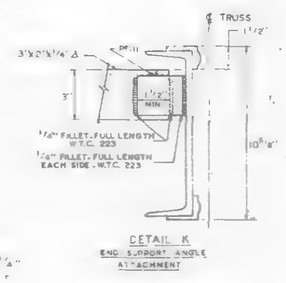
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

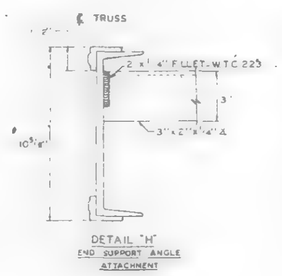


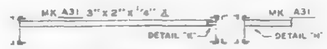
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14BL	3	C32T14BL x 59'-8 1/2"	ST 214BL
	T14BR	3	C32T14BR x 59'-8 1/2"	ST 214BL
BRIDGING TRUSSES	T11B	1	24T11B x 19'-11"	ST 218
	T12	3	24T12 x 19'-11"	ST 212
CLOSURE UNIT	BC	3	11/16" Ø 6'-6 1/2" TUBE	ST 212
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 1/4" x 19'-11"	ST 403
	A2	2	3"x 2"x 1/4" x 5'-11 9/16"	ST 403
	A3	1	3"x 2"x 1/4" x 5'-11 3/4"	ST 403
	A31	3	3"x 2"x 1/4" x 8'-8 1/2"	ST 410
CLOSURE PLATES	PP11	3	3" x 1/4" x 0'-2 3/16"	ST 412
DIAGONAL FLATS	F1	6	11"-3" x 5"/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-5"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	21	2" x 1 1/2" x .25" x 0'-6"	ST 400
Ø SHEAR ANCHOR	SA2	6	Ø REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" Ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3 7/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P9	6	3" x 1/2" x 1'-2"	ST 409

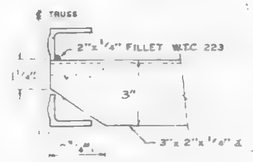
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie - (K)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1/4" FULL THROAT FILLET.







SECTION C-C
END SUPPORT ANGLE



SECTION A-A
END SUPPORT ANGLE

NO.	DATE	REVISION	BY

REF DRWG.		
7-AB3-28	10-4-68
7-AB4-28	7-22-68
7-AB1-13	10-4-68
7-AB2-7	7-22-68
7-AB2-15	10-4-68

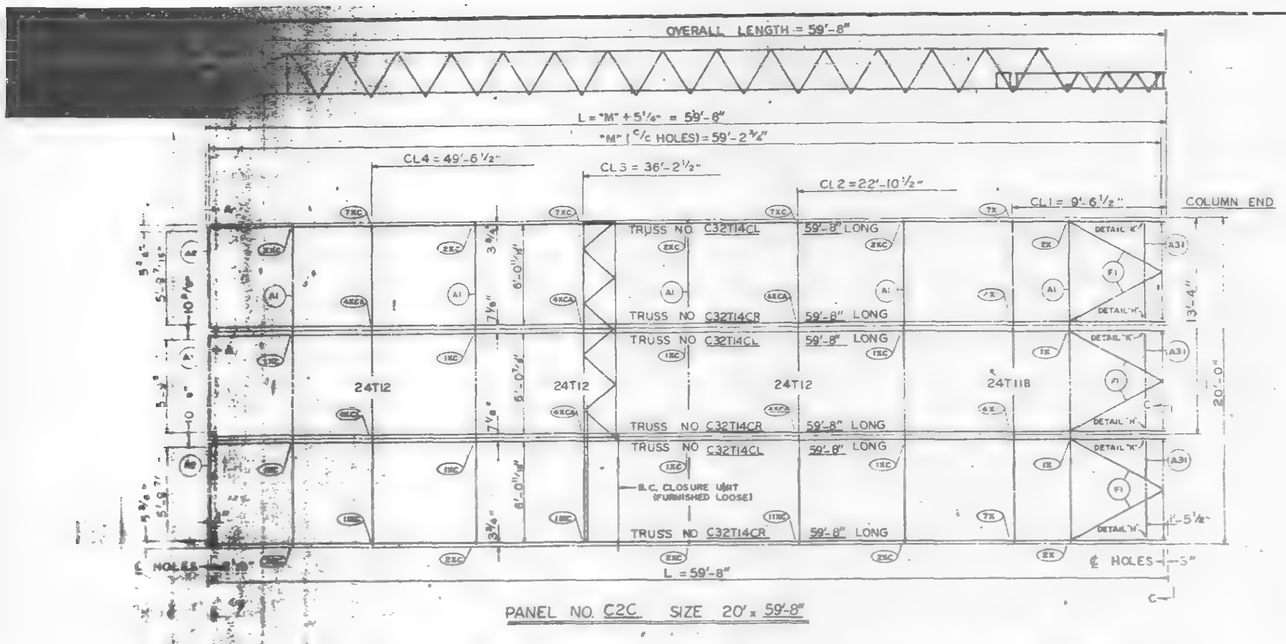
VOID

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C
FOR
THE PORT OF NEW YORK AUTHORITY

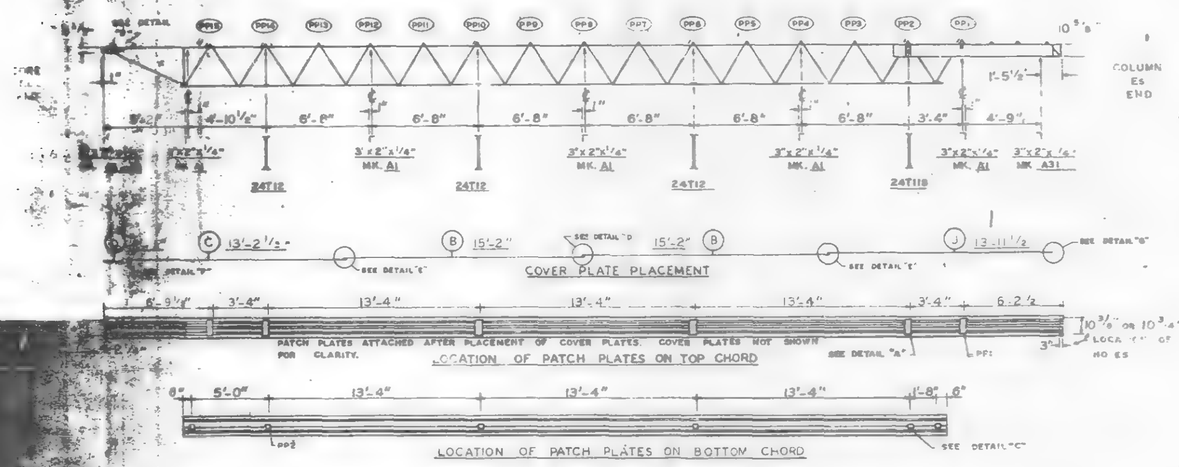
BLDG. A FLOORS 92 (NORTH)
PANEL C2B -20' x 59'-8 1/2"
BLDG. B FLOORS 92 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-28	PLATE
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.	DATE	DRAWN BY [illegible] DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY T.H. CHUNG DATE APRIL 28, 1969	AS CHANGES OF VENDOR DRWG.
DETAILED BY A.S. [illegible]		FABRICATION CONT NO W.T.C. 221	SHEET NO FB CB 1



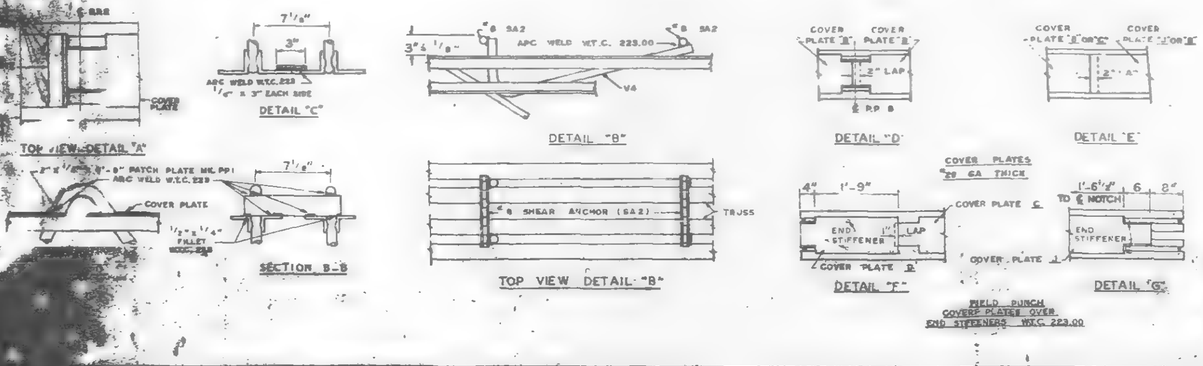
PANEL NO. C2C SIZE 20' x 59'-8"

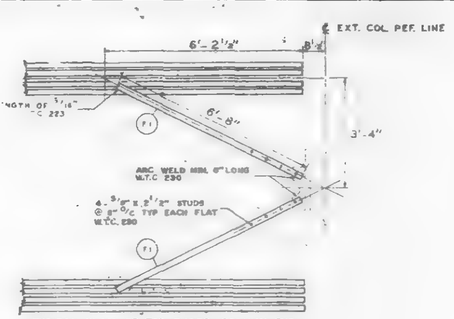


COVER PLATE PLACEMENT

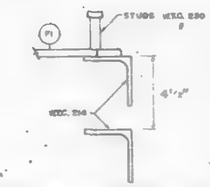
LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD





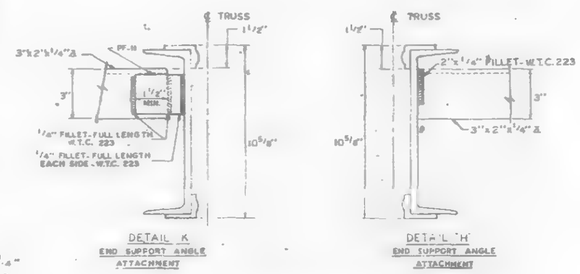
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



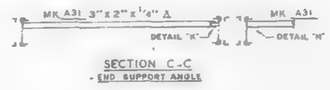
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE. COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14CL	3	C32T14CL x 59'-8"	ST 214CL
	T14CR	3	C32T14CR x 59'-8"	ST 214CL
BRIDGING TRUSSES	T11B	1	24T11B x 19'-11"	ST 211B
	T12	3	24T12 x 19'-11"	ST 212
CLOSURE UNIT	BC	3	11/4" D 6'-8 7/8" TUBE	ST 212
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	2	3" x 2" x 1/4" x 9'-11 9/16"	ST 403
	A3	1	3" x 2" x 1/4" x 8'-11 3/4"	ST 403
	A31	3	3" x 2" x 1/4" x 5'-8 1/8"	ST 410
CLOSURE PLATES	PP-11	3	3" x 1 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	6	11/2" x 8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 5/8" x 0'-3"	ST 400
COVER PLATES	B	6	5" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 15'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9 1/2" x .0135" x 13'-11 1/8"	ST 304
ANGLE CLIPS	C1	21	2" x 1 1/2" x .25" x 0'-6"	ST 400
"8 SHEAR ANCHOR	SA2	6	"8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ϕ x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3 5/8" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .36" x 0'-9"	ST 400
	P3	1	4 1/2" x .36" x 1'-0"	ST 400
	P9	6	3" x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (K).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"s 1/4" FULL THROAT FILET.



NO.	DATE	REVISION	BY

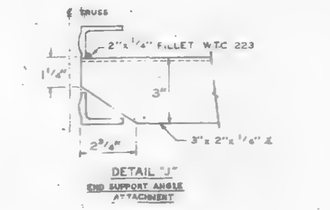


SECTION C-C
END SUPPORT ANGLE

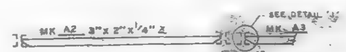
VOID

REF DRWG.

7-AB3-28	10-4-68
7-AB4-28	7-22-68
7-AB1-3	10-4-68
7-AB2-7	7-22-68
7-AB2-15	10-4-68



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

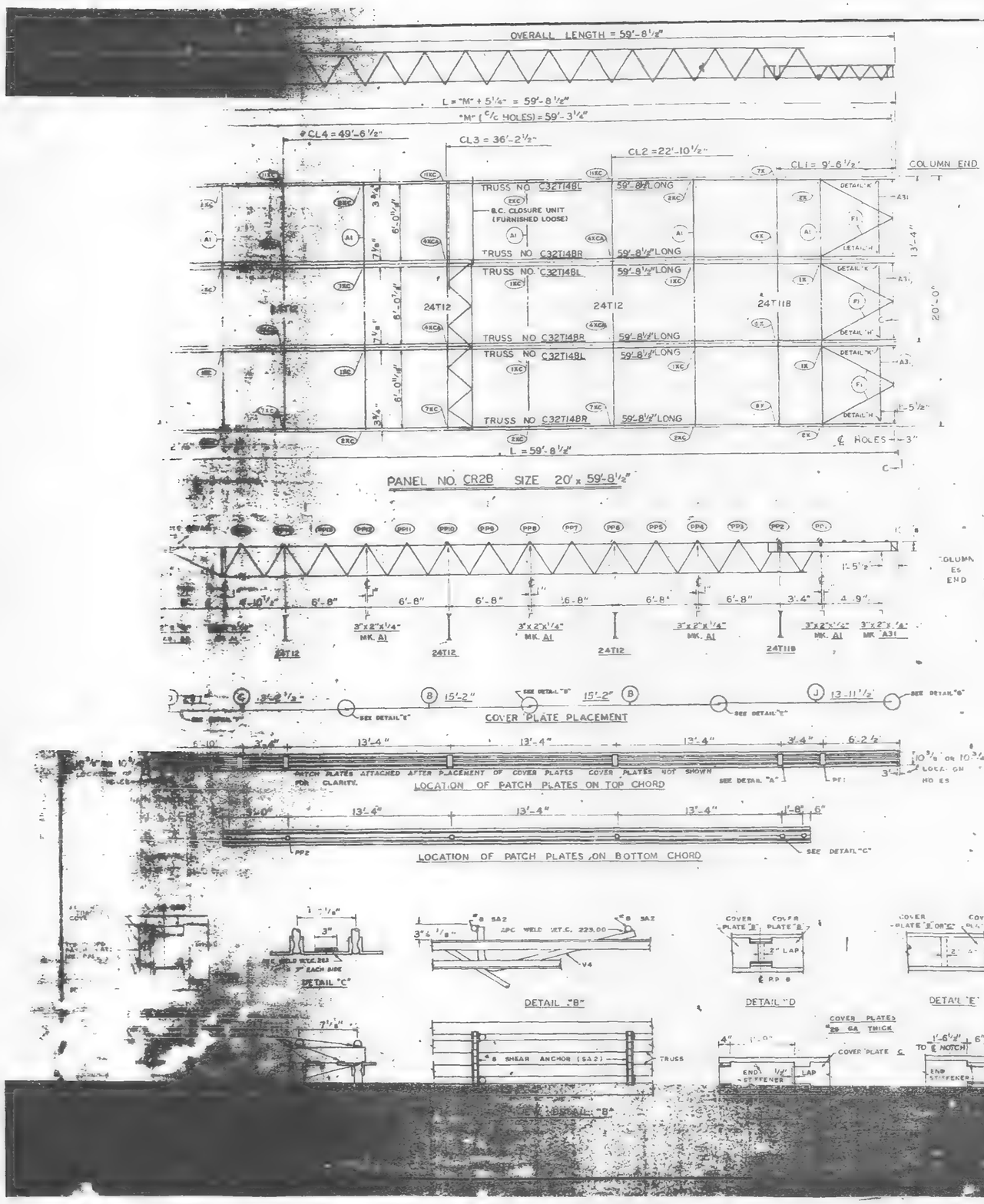
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C
FOR
THE PORT OF NEW YORK AUTHORITY

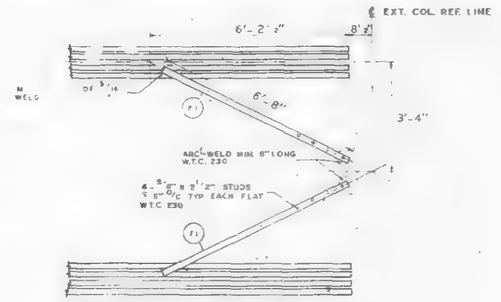
BLDG. A FLOORS 59 & 92 (SOUTH)

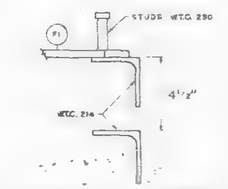
PANEL C2C - 20' x 59'-8"

BLDG. B FLOORS 59 & 92 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-28	PLATE
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.	DATE	DRAWN BY [illegible] DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY [illegible] FOR [illegible]	DATE	CHECKED BY T.M. CHUBB DATE APRIL 28, 1969	IN CHARGE PROD. DEV.
DETAILED BY A.V. MEIER		FABRICATION CONT NO W.T.C. 221	SHEET FP-6

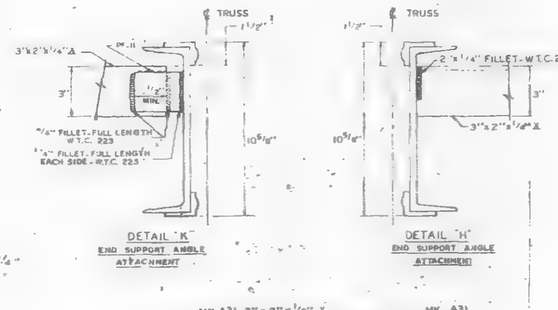


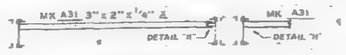




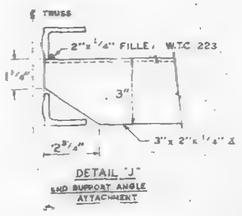
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T148L	3	C32T148L x 59'-8 1/2"	ST 214BL
	T148R	3	C32T148R x 59'-8 1/2"	ST 214BL
BRIDGING TRUSSES	T118	1	24T118 x 19'-11"	BT 211B
	T12	3	24T12 x 19'-11"	BT 212
CLOSURE UNIT	BC	3	1 1/4" □ 6'-6 1/2" TUBE	BT 212
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 1/4"x 19'-11"	ST 403
	A2	2	3"x 2"x 1/4"x 5'-11 3/4"	ST 403
	A3	1	3"x 2"x 1/4"x 5'-11 3/4"	ST 403
	A31	3	3"x 2"x 1/4"x 5'-8 1/8"	ST 410
CLOSURE PLATES	PF-11	3	3'x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	6	1 1/2" x 5" 6" x 6'-8"	ST 402
PATCH PLATES	PP1	6	2"x 1/4" x 0'-9"	ST 400
	PP2	18	3"x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9"x .0135" x 15'-2"	ST 303
	C	3	0"x .0135" x 13'-2 1/2"	ST 303
	D	3	9"x .0135" x 2'-1"	ST 303
	J	3	9"x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	21	2"x1 1/2"x 25"x 0'-6"	ST 400
ø 8 SHEAR ANCHOR	SA2	6	ø 8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1/4" x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/4" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P9	6	3"x 1/2"x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (J).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1/4" FULL THROAT FILLET.





SECTION C-C
END SUPPORT ANGLE



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

SECTION A-A

NO.	DATE	REVISION	BY

REF DRWG.

7-AB3-29	10-4-68
7-AB4-28	7-22-68
7-AB1-13	10-4-68
7-AB2-7	7-22-68
7-AB2-15	10-4-68

VOID

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 92 (NORTH)

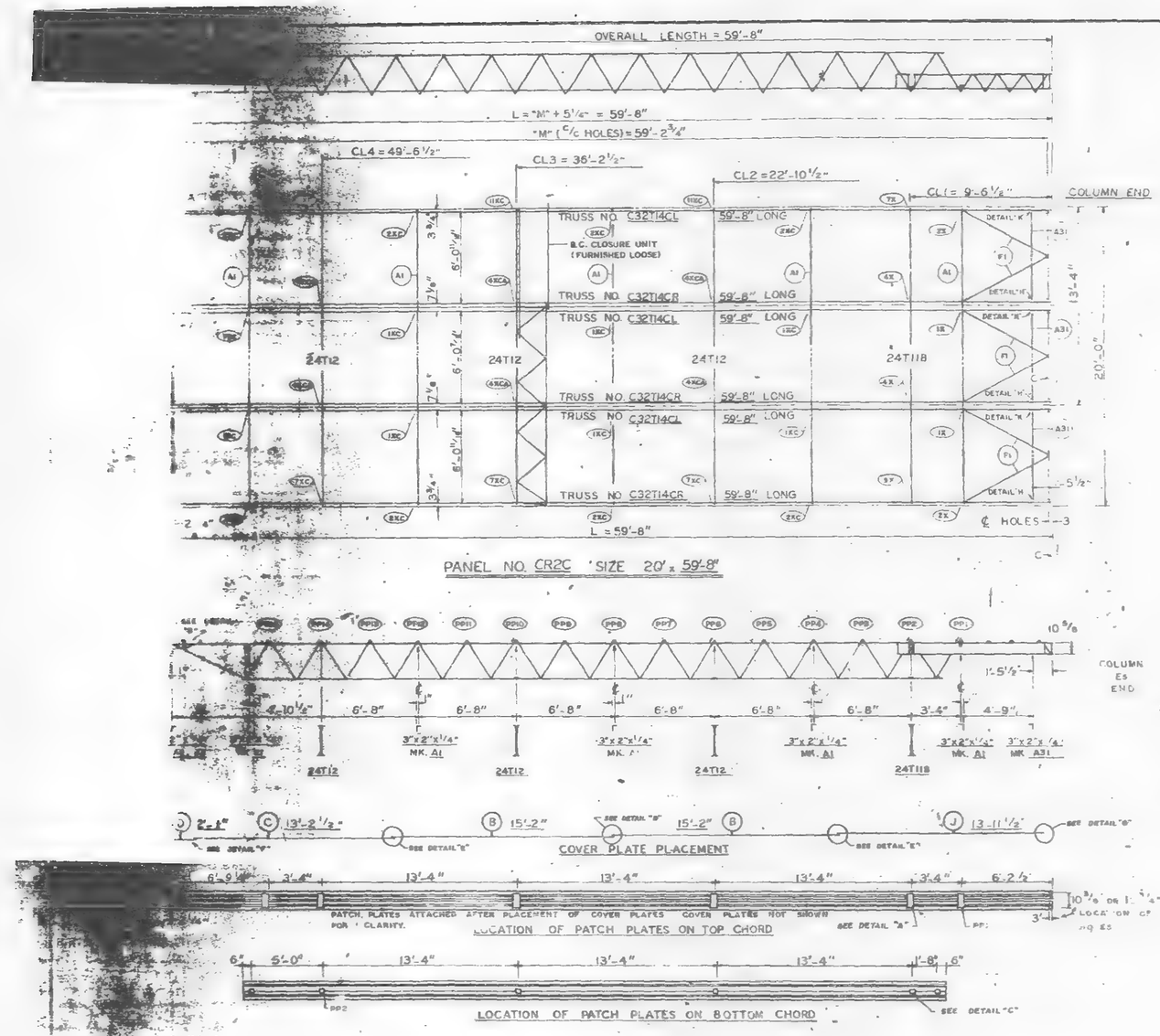
PANEL CR2B - 20' x 59'-8 1/2"

BLDG. B FLOORS 92 (WEST)

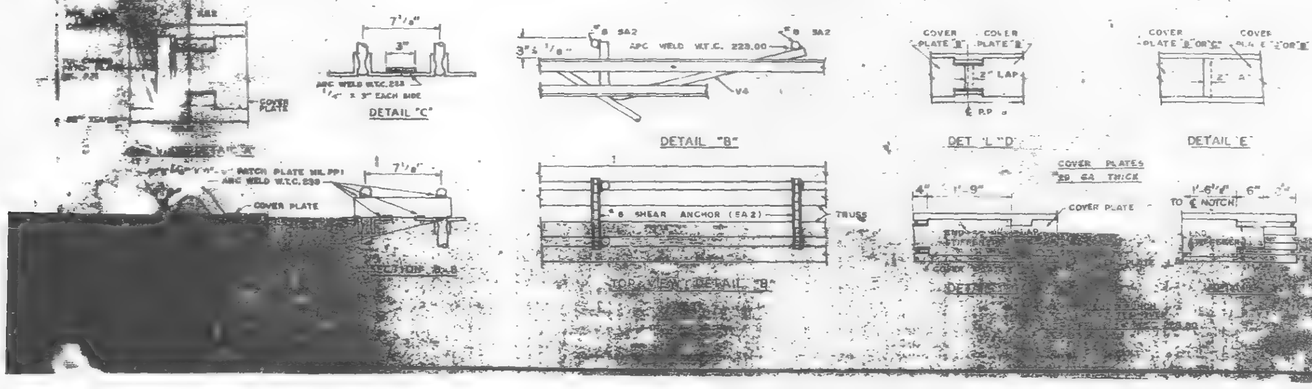
FABRICATION BY LACLEDE STEEL COMPANY

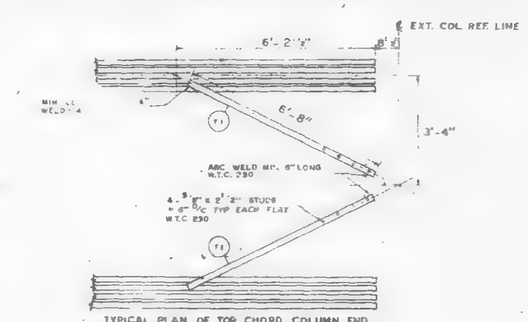
FABRICATED | DESIGN DRAWING NO. 7-AB3-23

DRAWN BY | CHECKED BY | APPROVED BY
APRIL 28, 1968

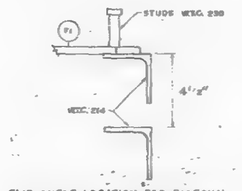


PANEL NO. CR2C SIZE 20' x 59'-8"





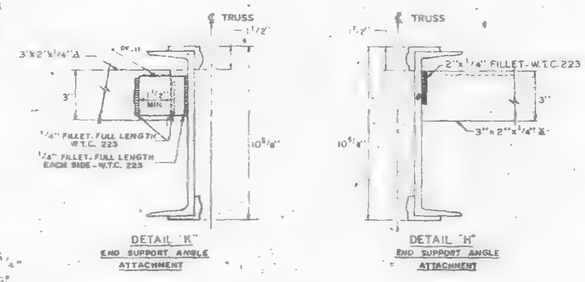
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

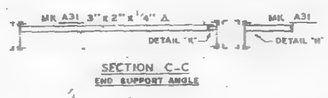


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

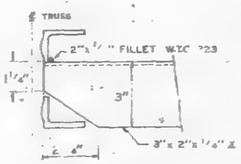
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14CL	3	C32T14CL x 59'-8"	ST 214CL
	T14CR	3	C32T14CR x 59'-8"	ST 214CL
BRIDGING TRUSSES	T11B	1	24T11B x 19'-11"	ST 211B
	T12	3	24T12 x 19'-11"	ST 212
CLOSURE UNIT	BC	3	1/4" D 8'-9 1/2" TUBE	ST 212
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x' 4"x 19'-11"	ST 403
	A2	2	3"x 2"x' 1'-4"x 5'-11 9/16"	ST 403
	A3	1	3"x 2"x' 1'-4"x 5'-11 3/4"	ST 403
	A31	3	3"x 2'x 4"x 5'-8 1/8"	ST 410
CLOSURE PLATES	PP-11	3	3"x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	6	1'-2" x 5'-8" x 5'-8"	ST 402
PATCH PLATES	PP1	18	2"x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 5/8" x 0'-3"	ST 400
COVER PLATES	B	6	9"x .0135" x 15'-2"	ST 303
	C	3	9"x .0135" x 13'-2 1/8"	ST 303
	D	3	9"x .0135" x 2'-1"	ST 303
	J	3	8 1/8" x .0135" x 13'-11 1/8"	ST 304
ANGLE CLIPS	C1	21	2"x1 1/2"x .25"x 0'-6"	ST 400
"B SHEAR ANCHOR	SA2	6	"B REBAR x 0'-8"	ST 400
CONNECTION BAR	CB1	5	1" B x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3 5/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x 39" x 0'-9"	ST 400
	P3	1	4 1/2" x 36" x 1'-0"	ST 400
	P9	6	3"x 1/2"x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e. (J).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.





SECTION C-C
END SUPPORT ANGLE



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NO.	DATE	REVISION	BY

REF DRWG.

7-AB3-29	10-4-68
7-AB4-28	7-22-68
7-AB1-13	10-4-68
7-AB2-7	7-22-68
7-AB2-15	10-4-68

VOID

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

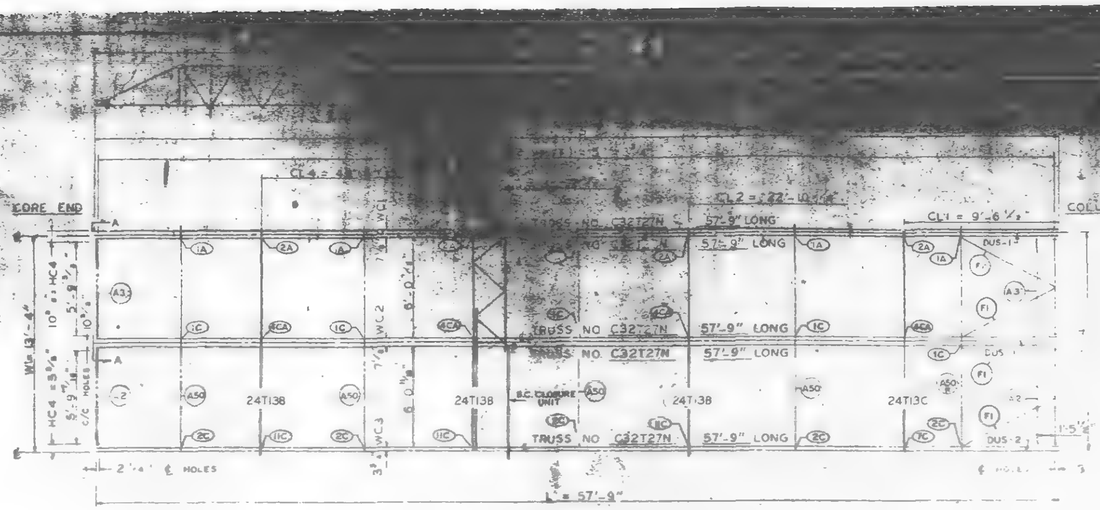
BLDG. A FLOORS 59 & 92 (SOUTH)

PANEL CR2C - 20' x 59'-8"

BLDG. B FLOORS 59 & 92 (EAST)

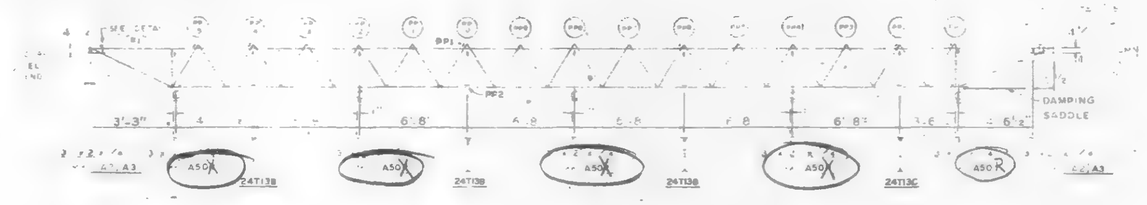
FABRICATION BY LACLEDE STEEL COMPANY

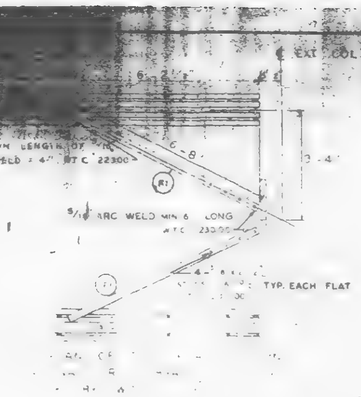
DESIGN DRAWING NO. 7-AB3-29
DRAWN BY
DATE APRIL 28, 68
CHECKED BY
DATE APR. 28, 68



PANEL NO. C6N SIZE 13'-4" x 57'-9"

C & D DIMENSION HC4 ARE RELATED TO HOLES IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE C ON THE COLUMN CLIPS & BRACES



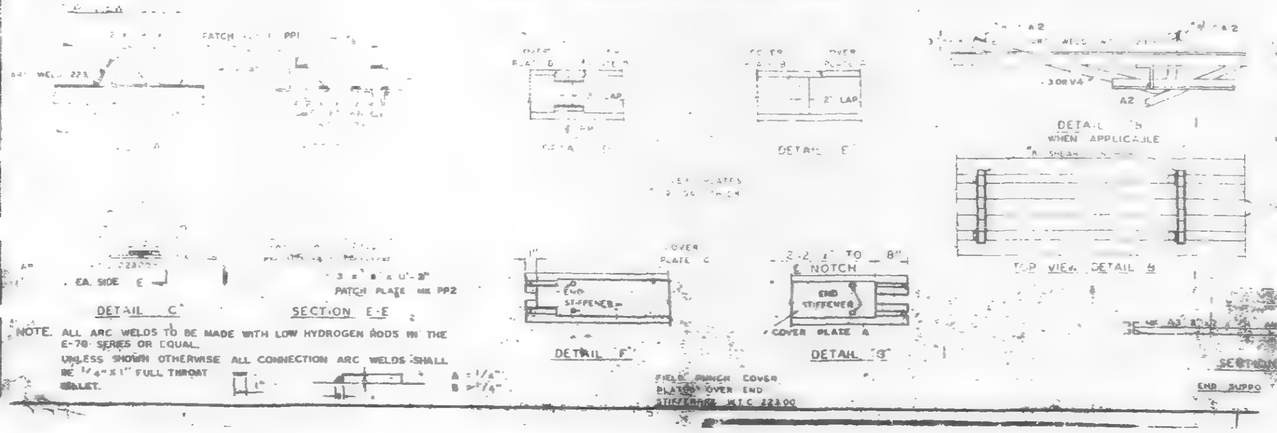


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

FLOOR TRUSSES	T13B	3	24T13B - 14'-1 1/2"	BT 2138
	T13C	1	24T13C - 14'-1 1/4"	BT 2138
BRIDGING TRUSSES	A2	2	3 x 2 x 4 x 5'-11 15/16"	ST 403
	A3	2	3" x 2" x 5/16" x 5'-11 3/4"	ST 403
	A5O	4	3" x 2" x 5/16" x 14'-1 1/16"	ST 413
DIAGONAL FLATS	F	4	2 x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2 x 4" x 0'-9"	ST 400
	PP2	18	3 x 3/8 x 0'-3"	ST 400
[illegible]	A	3	[illegible]	[illegible]
	B	6	5 x 0.35 x 5'-2"	ST 413
	C	3	5 x 0.35 x 3'-2"	[illegible]
[illegible]	C	13	2" x 1/2" x 1 1/2" x 0'-8"	ST 400
SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-5"	5'-00
DAMPING SADDLE	DUS-1	2	3 x 4.5 x 3/8 x 3'-7"	T 298
	DUS-2	2	3 x 4.5 x 3/8 x 3'-7"	T 298
CONNECTION BAR	CB1	9	1" x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/16" x 6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3		4 1/2" x .39" x 1'-0"	ST 400
	P4	4	3" x 1/2" x 0'-11"	ST 416
CLOSURE UNIT	BC	3	1" x 0 6-6 1/2" TUBE	BT 2138

NUMBERS AND LETTERS IN ELLIPSES ie., (10), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 204 OR CD 229.

NO.	DATE	REVISION	BY



NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

A = 1/4"
B = 5/16"

FIELD PUNCH COVER PLATES OVER END STIFFENER W.T.C. 22300

REF DRWG		
T-1A2	15.1	10-4-68
T-1B4	4 & 6	7-22-68
T-1B4	42	10-15-68
SA		1-6-69
T-AB3	77	1-6-69
T-46	24	1-6-69
T-AB4		7-22-68

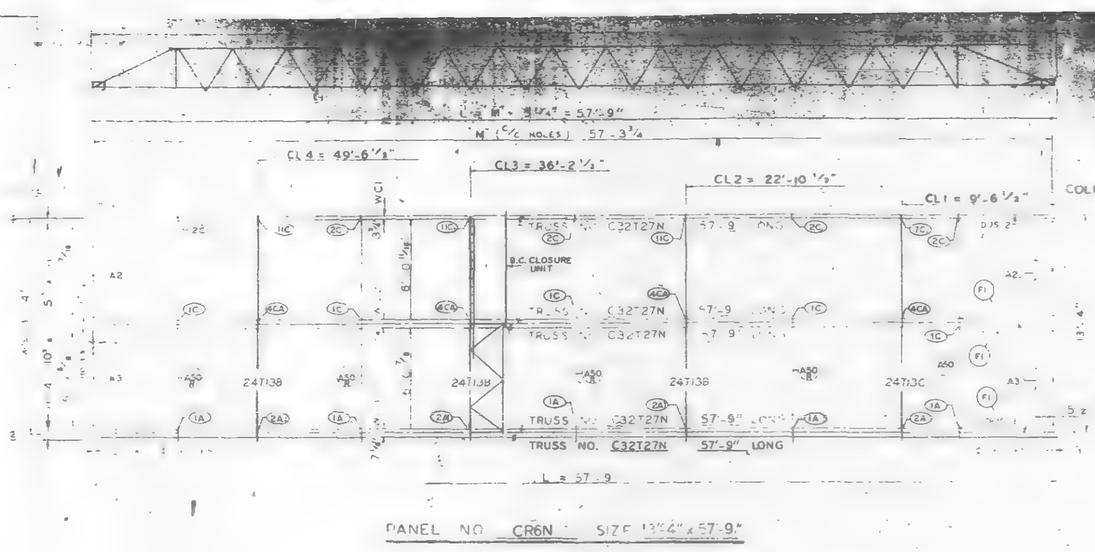
CHECKED HELE CHRISTIANSEN-ROBERTSON Structural Engineers
4/23/69 SK

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

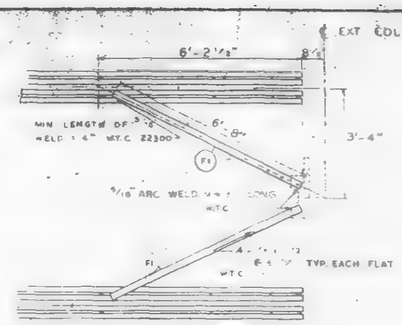
BLDG. A FLOORS 44 (NORTH ONLY)
PANEL C6N 13'-4" x 57'-9"
BLDG. B FLOORS 44 (WEST ONLY)

FABRICATION BY LACLEDE STEEL COMPANY

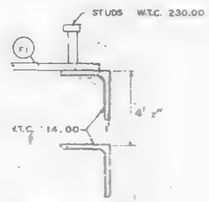
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO T-AB3-77	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.	DATE	DRAWN BY DATE MARCH 24, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY A.B.PAGE DATE MARCH 24, 1969	IN CHARGE OF SHOP DET.
LACLEDE STEEL CO. DETAILED BY A.C. WEBER		FABRICATION CONT. NO W.T.C. 221	SHEET NO FP-C6N



PANEL NO. CR6N SIZE 13'-4" x 57'-9"

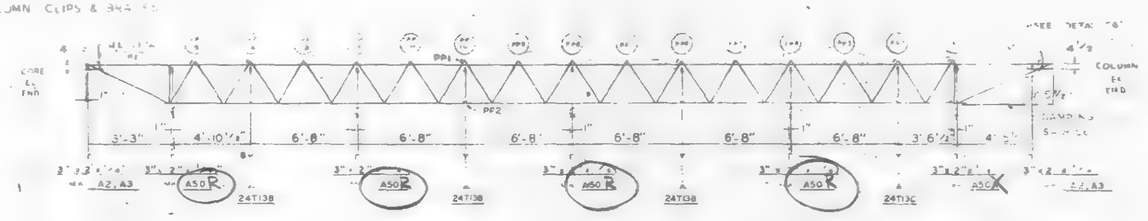


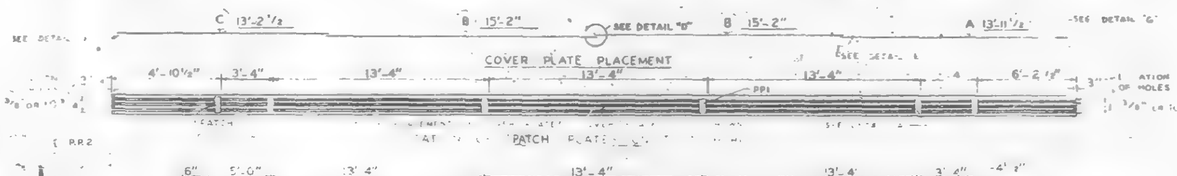
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL				
MATERIAL	MK	PCS		
FLOOR TRUSSES	T27N	5	C32T27N - 57'-9" LONG	ST 2...
	T13B	3	24T13B - 14'-1 1/2"	ST 213B
	T13C	1	24T13C - 14'-1 1/2"	ST 213C
	A2	2	3 1/2" x 3" x 1/4" x 5'-0"	ST 403
	A3	4	3 1/2" x 3" x 1/4" x 5'-4"	ST 403
	A50 A50R	4	3" x 2 1/2" x 1/4" x 14'-1 1/4"	ST 413
			2 1/2" x 2" x 1/4" x 6'-8"	ST 402
			3" x 2" x 1/4" x 6'-8"	ST 400
PATCH PLATES	PP2	1A	3" x 2" x 3"	ST 400
			3" x 2 1/2" x 1/4" x 3'-6"	ST 400
MEAN ANCHORS	SA2	3	8 REBARS x 1'-0"	ST 400
				T298
				T298
CONNECTION BAR	CB1	4	3" x 3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 8" 8"	ST 400
	P2	4	6 1/2" x .38" x 0'-8"	ST 400
	P3		4 1/2" x .38" x 1'-0"	ST 400
	P4	4	3" x 2" x 0'-11"	ST 416
CLOSURE UNIT	BC	3	1 1/4" □ 6'-8 1/2" TUBE	ST 213B





NUMBERS AND LETTERS IN ELLIPSES ie., (1C). INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 204, OR CD 229.

NO	DATE	REVISION	BY

REF		
PWG	15.1	10-4-68
	5	7-22-68
	42	10-15-68
		1-6-69
	78	1-6-69
	24	1-6-69
	5	7-22-68

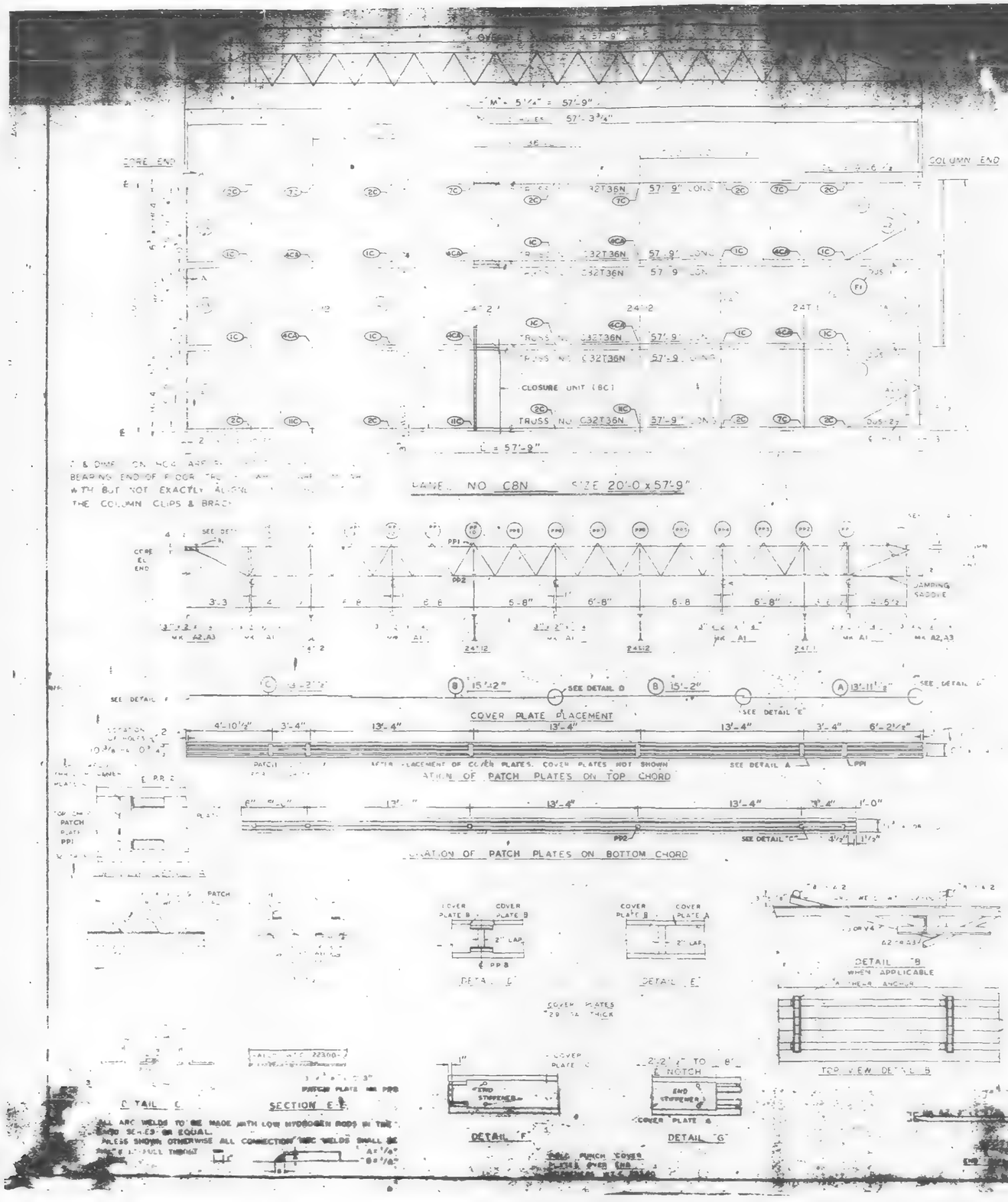
GRUNING-MILLER CHRISTIANSEN-ROBERTSON Structural & Civil Engineers
APPROVED AS NOTED

FOR FABRICATION DETAILS
WORLD TRADE CENTER
THE PORT OF NEW YORK AUTHORITY
BLDG. A FLOORS 44 (NORTH ONLY)
PANEL CR6N 13'-4" x 57'-9"
BLDG. B FLOORS - 44 (WEST ONLY)
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. T-1852-38	PLATE
APPROVED FOR FABRICATION BY FOR PONTA	DATE	DRAWN BY DATE MARCH 24, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY J.R.P.Jr. DATE MARCH 24, 1969	IN CHARGE OF SHOP DETAILING
DETAILED BY J.C. KLEIN		FABRICATION CONT NO W.T.C. 221	SHEET NO FP-CR6N

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 5/16" FULL THROAT FILLET.

DETAIL "C" SECTION E-E DETAIL "F" DETAIL "G" SECTION A-A



BRIDGING TRUSSES				
ANGLE				ST 400
DIAGONAL FLATS	W1	6	1 1/2" x 5/16" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1'-4" x 0'-8"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	9" x .0135" x 13'-11 7/8"	ST303
	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 7/8"	ST303
ANGLE CLIPS	C1	21	2" x 1 1/2" x 1 1/4" x 0'-8"	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/4" x 3 1/2" x 3/8" x 3'-6 1/8"	ST298
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 1/8"	ST298
CONNECTION BAR	CB1	4	1 3/8" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2-4x3 1/2 x 1/4	BT212
			240 x 6'-6"	CD204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-8 3/8"	ST 400
	P2	4	4 1/2" x .38" x 0'-9"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, (2) 202 OR CD 204.

NO.	DATE	REVISION	BY

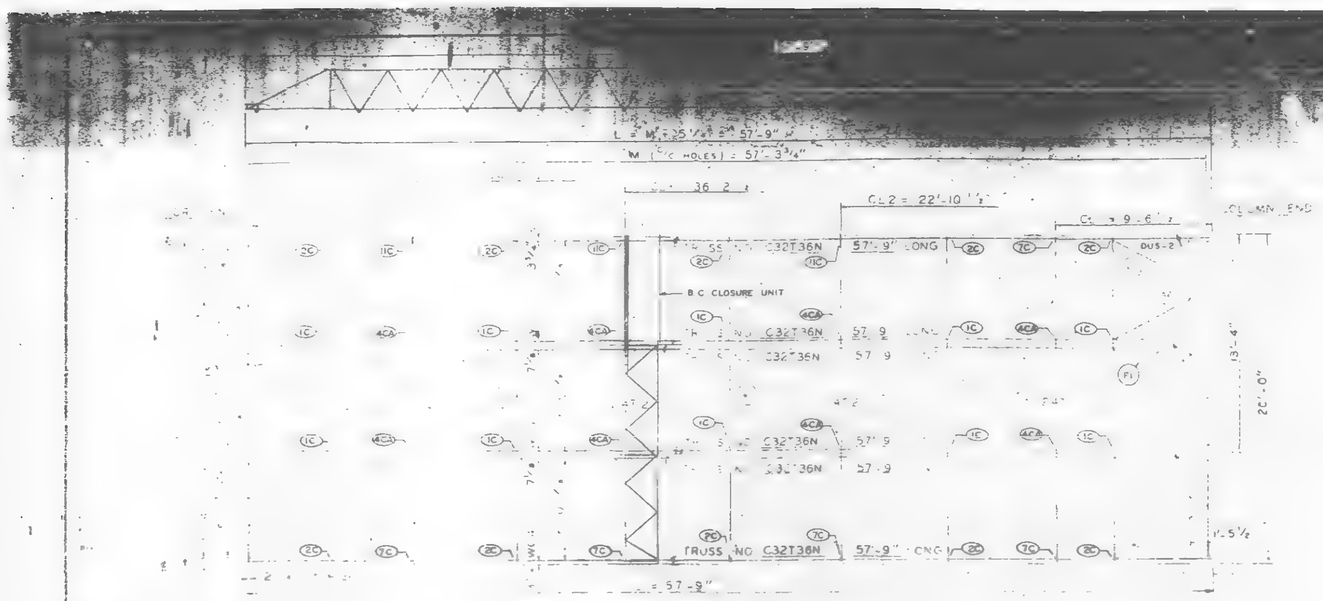
REF DRWG		
7-A84-19	12-20-68	
7-A84-3	10-15-68	
A84 5 6 5	7-22-68	
A84 41	7-22-68	
A84 4	1 6-69	
A83 56	1-6-69	
A8 32	1-6-69	
7-A84-A7	7-22-68	
A84 42	10-15-68	

SKILLING HELLE CHRISTIANSEN ROBERTSON
Structural & Civil Engineers
4/23/69 SK

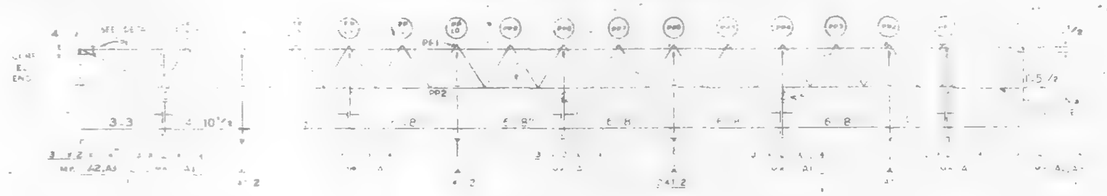
FLOOR PANEL DETAILS
WORLD TRADE CENTER N Y C
FOR
THE PORT OF NEW YORK AUTHORITY
LANE 44 (SOUTH ONLY)
PANEL C8N 20'-0" x 57'-9"

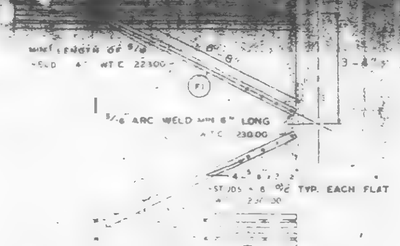
FABRICATED BY LACLEDE STEEL COMPANY
FOR ATES
AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY ... FOR POWER
APPROVED FOR FABRICATION BY ... FOR FABRICATOR
DATE
LACLEDE STEEL CO.
DETAILED BY A.S. KEMP
DESIGN DRAWING NO 7-B84-59
PLATE
DRAWN BY
DATE MARCH 31, 1969
CHECKED BY T.H. CHURA
DATE MARCH 31, 1969
FABRICATION CONT. NO.
WT. C.
IN CHARGE OF PROD. DEPT.
SHEET NO. CD C8N

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E60 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE FILLET WELDS THEREAT.

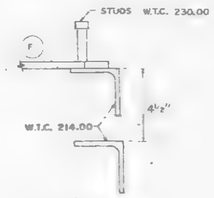


BAY NO CR8N SIZE 20'-0" x 57'-9"





TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

				REF.
			C32T36N 57'-9"	236N
BRIDGING TRUSSES	M1		2 4T12 @ 19'-11"	ST212
	T12		2 4T12 @ 19'-11"	ST212
3 1/2" x 1/4" ANGLE	A1		3" x 3" x 1/4" x 10'-8"	ST 403
	A2	26	3" x 3" x 1/4" x 10'-8"	ST 403
	A3	8	3" x 3" x 1/4" x 10'-8"	ST 403
DIAGONAL FLATS	F1	6	1 1/2" x 3/8" x 5'-8"	ST 402
PATCH PLATES	PP1	10	2" x 1/4" x 0'-9"	ST 400
	PP2	8	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	8" x .0135" x 13'-11"	ST303
	B	6	9" x .0135" x 19'-2"	ST303
	C	3	9" x .0135" x 8'-2"	ST303
ANGLE CLIPS		24	2" x 2" x 1/4" x 0'-6"	ST 400
7/8" SHEAR ANCHOR	SA2	9	7/8" REBAR x 0'-9"	ST 400
CLAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/8" x 3 3/4"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3 3/4"	ST 298
CONNECTION BAR	CB1	4	1 1/8" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 4x11 1/2 x 1/4 x 8 230 x 6'6 1/2"	ST212 CD 204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-8 1/8"	ST 400
	P2	4	4 1/2" x .38" x 0'-9"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie.. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY

7-AB4-18	12-20-68
	10-15-68
	7-22-68
	7-22-68
	1-6-69
	6-69
	5-69
	7-22-68
	10-15-68

SKILLING HELLE CHRISTIANSEN ROBERTSON Structural & Civil Engineers

4/23/69 SK

N 44 (SOUTH ONLY)

BAY CR8N 57'-9"

LACLEDE STEEL COMPANY

ALTON, ILLINOIS

APPROVED FOR FABRICATION FOR POWER	DATE	DESIGN DRAWING NO. 7-AB3-67	PLATE
BY		DRAWN BY LB DATE MARCH 31, 1969	
APPROVED FOR FABRICATION FOR FABRICATOR	DATE	CHECKED BY T.W.CHURA DATE MARCH 31, 1969	IN CHARGE OF ENGR. DEPT.
BY		FABRICATION CODE NO.	SHEET NO. CR8N

LACLEDE STEEL CO.

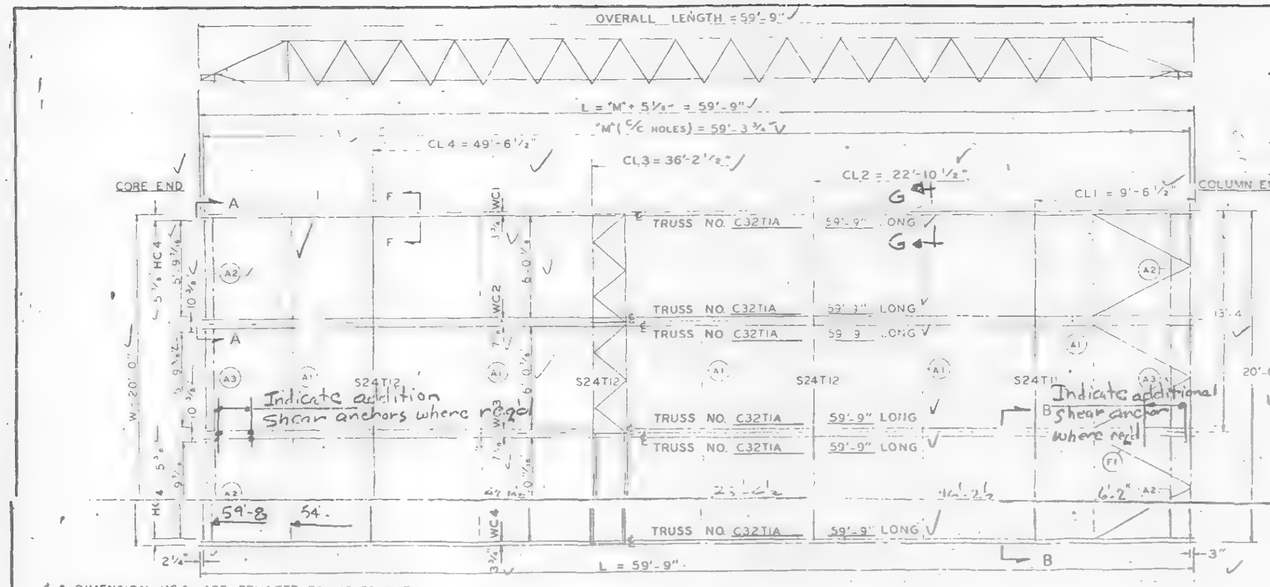
DETAIL E SECTION E-E

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS OR THE (E-70) SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 5/16" FILLET WELDS.

DETAIL F

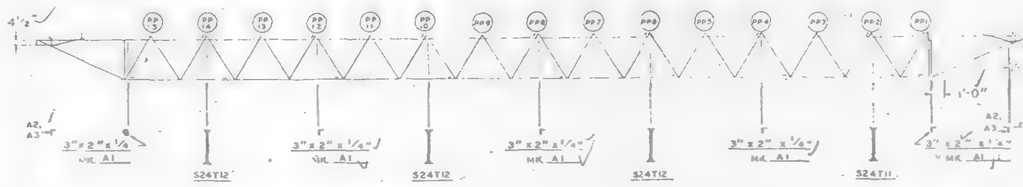
DETAIL G

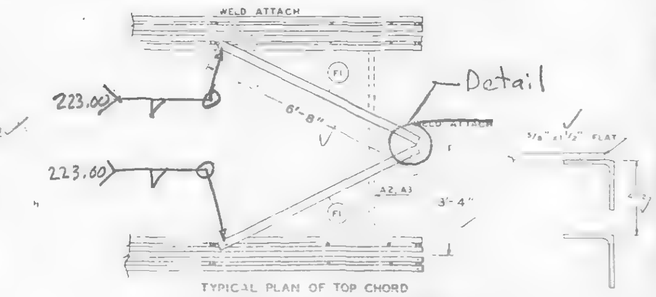
SECTION A-A



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

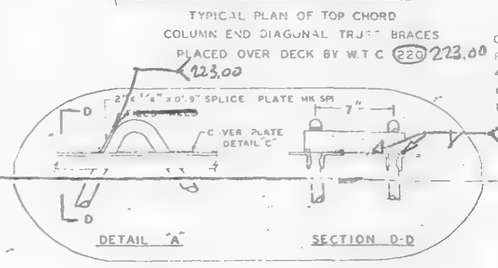
PANEL NO. C1A SIZE 20', 59'-9"

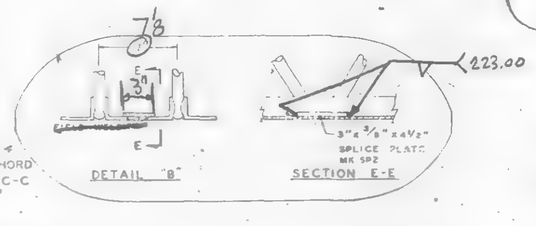


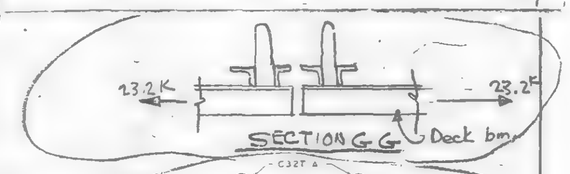


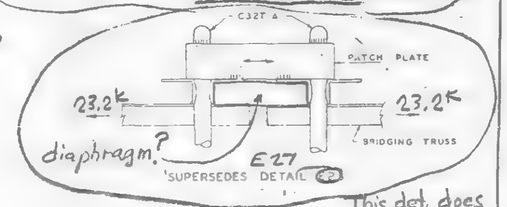
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	REF DWG
FLOOR TRUSSES				
BRIDGING TRUSSES				
3"x2"x1/4" ANGLE (Fy = 50 ksi)				
DIAGONAL FLATS				
SPLICE PLATES (Fy =)				
COVER PLATES				
ANGLE CLIPS				



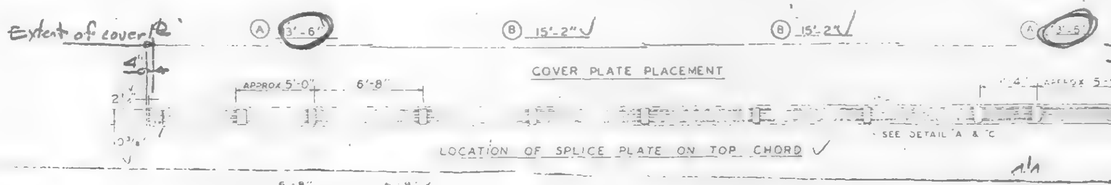


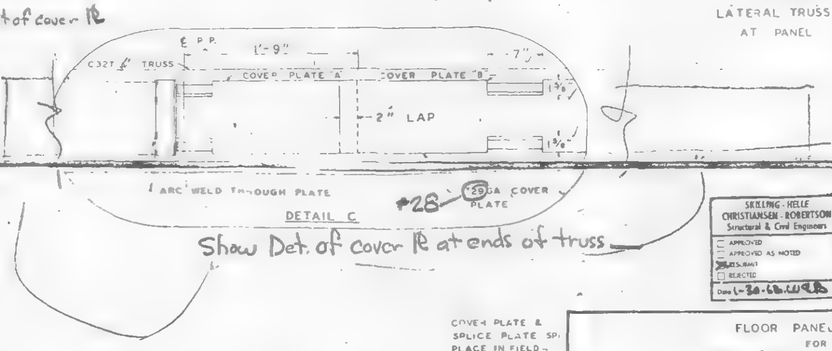


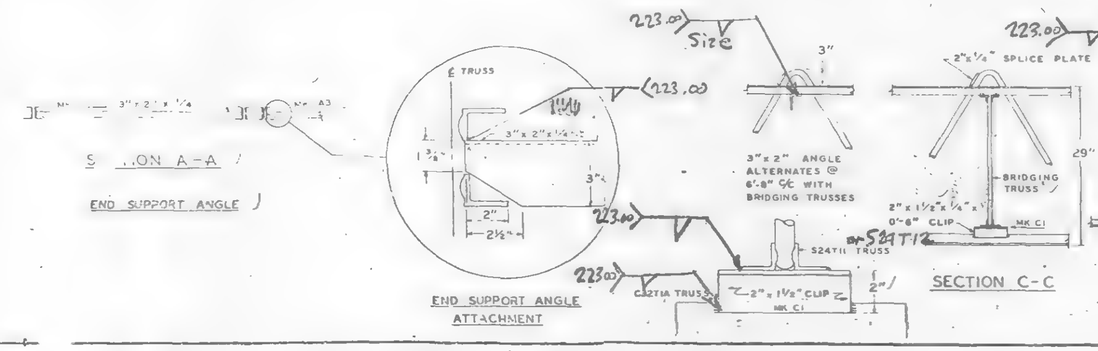


SECTION F-F
LATERAL TRUSS CONTINUITY AT PANEL JUNCTION

This det. does not seem to provid. splice for 23.2K
Tests if made must have procedure approved by Engr prior to start of testing work.







COVER PLATE & SPLICE PLATE SP. PLACE IN FIELD

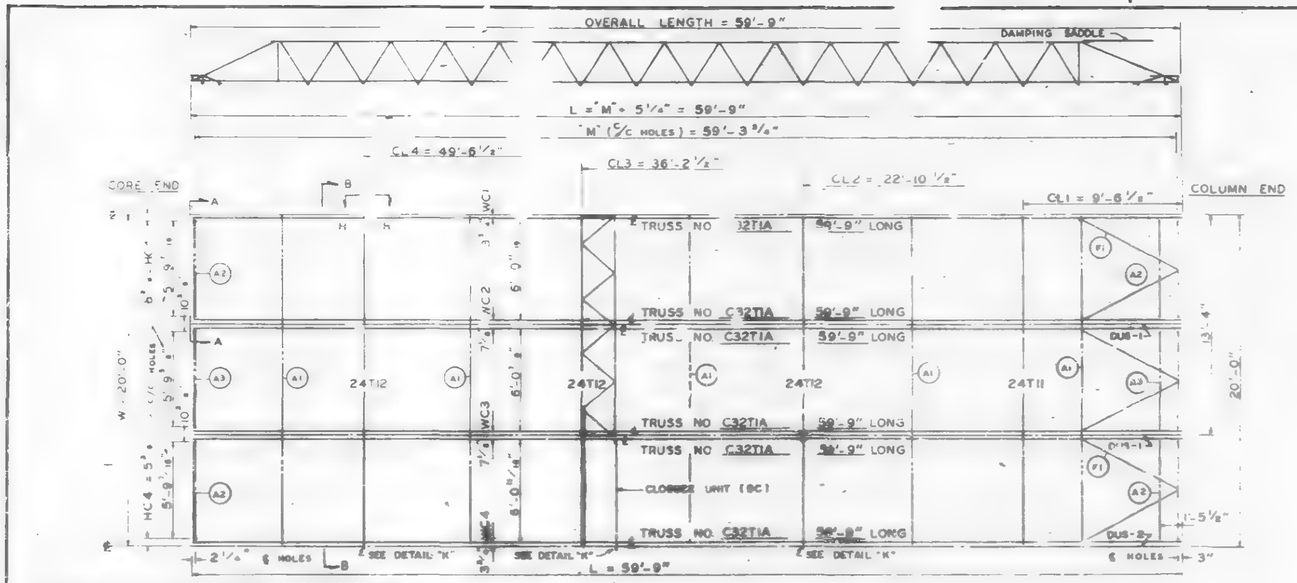
Show Det. of cover PL at ends of truss

SKILLING - HELLE CHRISTIANSEN - ROBERTSON
Structural & Civil Engineers
☐ APPROVED
☐ APPROVED AS NOTED
☒ RESUBMIT
☐ REJECTED
Date 1-30-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

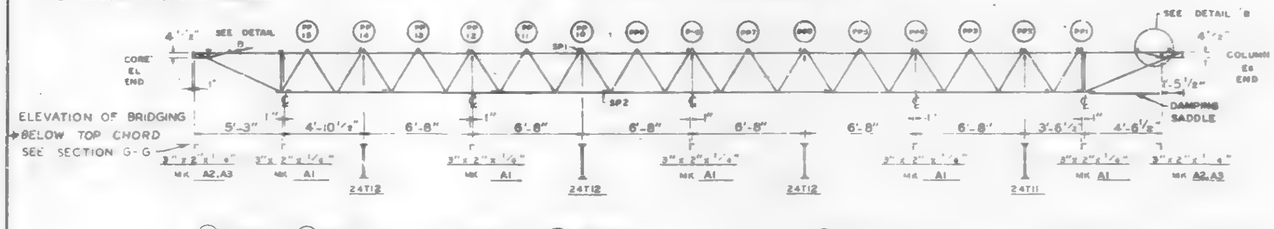
BLDG A - F. 00'S: 12-24, 26-38 (NORTH & SOUTH), 49-58, 60-66, 68-69 (NORTH)
PANEL C1A - 20'-0" x 59'-9" LONG (No Req'd.)

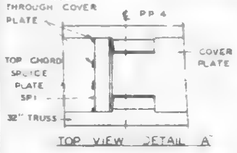
FABRICATION BY: LACLEDE STEEL COMPANY			
FABRICATED AT: MADISON, ILLINOIS		DESIGN DRAWING NO 7-A83-7 10-20-67	PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A.	DATE	DRAWN BY: S.R. DATE: JAN 1, 1968	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: J.B. PAUL DATE: JAN 1, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY: A.C. WEBER		FABRICATION CONT. NO W.T.C. 221	SHEET NO. FP-C1A



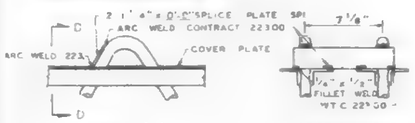
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. C1A SIZE 20'-0" x 59'-9"





TOP VIEW DETAIL "A"



DETAIL "A" SECTION D-D

DETAIL "D" DETAIL "E"

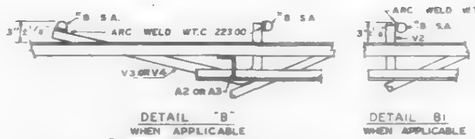
COVER PLATES 29 GA THICK

DETAIL "C" SECTION E-E

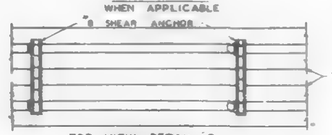
NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FILLET WELDS

DETAIL "F" DETA "G"

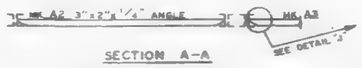
FIELD PUNCH COVER PLATES OVER END STIFFENERS WT C 223.00



DETAIL "B" WHEN APPLICABLE DETAIL B1 WHEN APPLICABLE

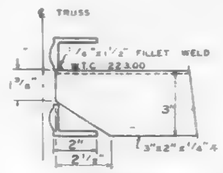


TOP VIEW-DETAIL "B"

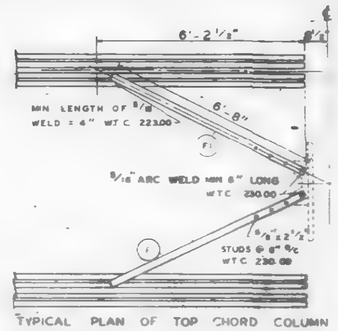


SECTION A-A
END SUPPORT ANGLES

TYPICAL CONNECTION
LATERAL CONNECTION OF 3"x2" ANGLES



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

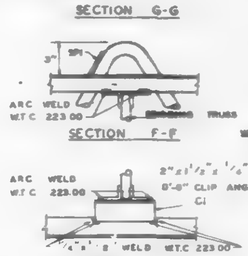


TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

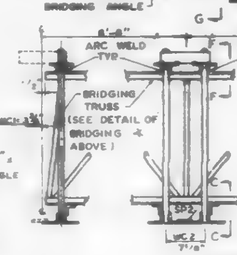
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1A	16	[illegible]	ST20-A
BRIDGING TRUSSES	T1L	1	[illegible]	BT2-1
	T12	3	[illegible]	BT2-2
3"x2"x1/4" ANGL		8	3"x2"x1/4" x [illegible]	ST-100
	A2	4	3"x2"x1/4" x 5'-11 5/8"	ST-400
	A3	2	3"x2"x1/4 x 5'-11 1/2"	ST-400
DIAGONAL FLATS	F1	6	1 1/2" x 3/8" x 6'-8"	ST-400
SPLICE PLATES	SP1	4	2" x 1/4" x 0'-9"	CD-201
	SP2	4	3" x 3/8" x 0'-4 1/2"	CD-201
	SP5	5	2" x 1/4" x 0'-8"	CD-201
COVER PLATES	A	3	8" x .0135" x 13'-11 1/2"	ST-303
	B	6	9" x .0135" x 15'-2"	ST-303
	C	3	7" x .0135" x 13'-2 1/2"	ST-303
	D	3	9" x .0135" x 1'-9"	ST-303
ANGLE CLIPS	C1	21	8" x 1 1/2" x 1/4" x 0'-8"	CD-201
3/4" ℄ SHEAR ANCHOR	SA	12	3/4" ℄ REBAR x 0'-9"	CD-201
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/8" x 3'-7 3/8"	ST-298
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-7 3/8"	ST-298
CONNECTION BAR	CB	10	3/4" ℄ x 0'-8"	CD-201
CLOSURE UNIT	BC	3	2 - L 6 x 4 x 1/4" x 230 x 6'-4"	BT-212 CD-204

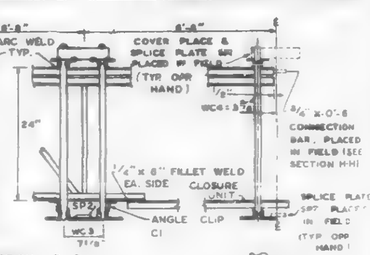
SECTION G-G



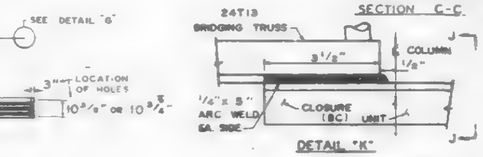
SECTION F-F



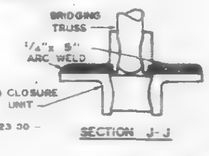
SECTION C-C



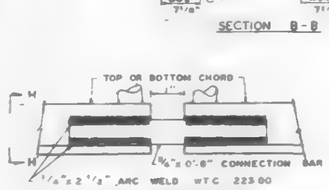
SECTION B-B



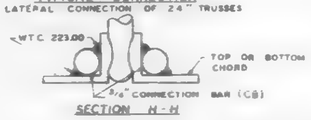
DETAIL "K"



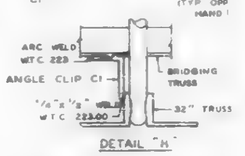
SECTION J-J



TYPICAL CONNECTION
LATERAL CONNECTION OF 24" TRUSSES



SECTION H-H



DETAIL "H"

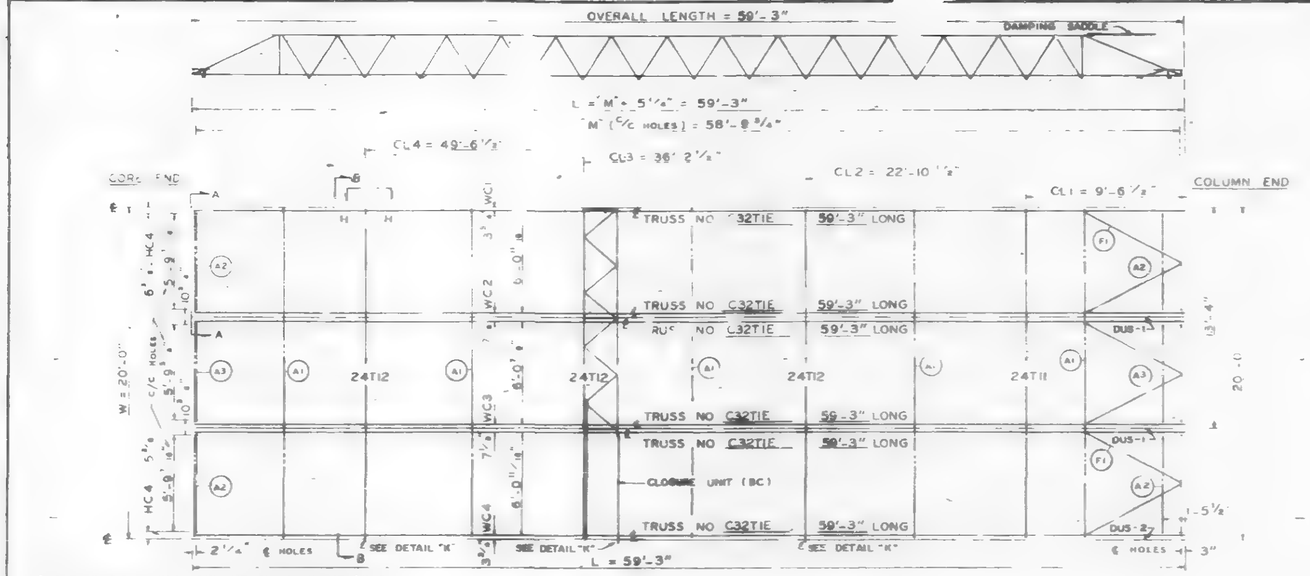
REF DRWG		
7-AB4-3 & 31	1-3-68	
7-AB4-15 & 16	1-3-68	
7-AB4-39-41	1-3-68	
SA-124	10-20-67	
7-AB3-2	3-68	
7-AB-2	2-15-68	
7-AB2-6 & 7	2-15-68	
7-AB4-42	4-1-68	

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 12-24, 26-30 (NORTH & SOUTH); 49-50, 60-66, 68, 69 (NORTH) PANEL C1A - 20'-0" x 59'-9"

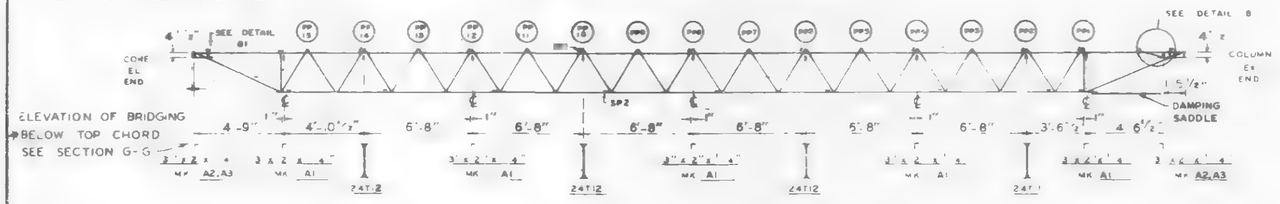
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-7 4-1-68	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.	DATE	DRAWN BY L.J. DATE APRIL 10, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY J.R. PAUL DATE APRIL 10, 1968	IN CHARGE OF PROD DEV
LACLEDE STEEL CO. DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO FP C1A

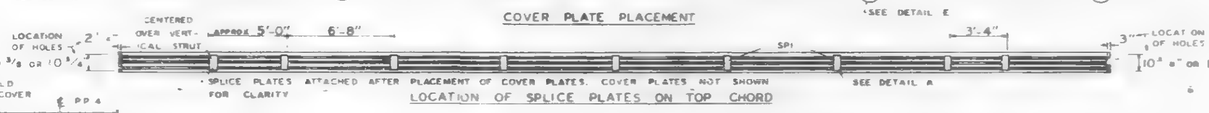


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

PANEL NO. C1E SIZE 20'-0" x 59'-3"



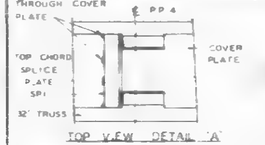
COVER PLATE PLACEMENT



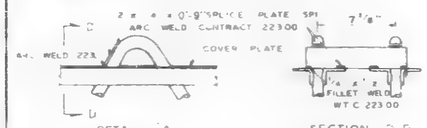
SPLICE PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

LOCATION OF SPLICE PLATES ON TOP CHORD

LOCATION OF SPLICE PLATES ON BOTTOM CHORD



TOP VIEW DETAIL "A"

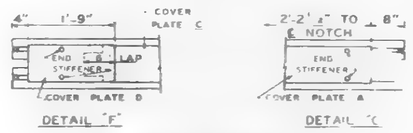


DETAIL "A" SECTION D-D

DETAIL "D" DETAIL "E"

COVER PLATES 28 GA THICK

DETAIL "C" SECTION E-E

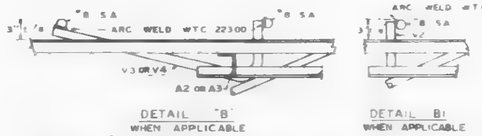


DETAIL "F" DETAIL "C"

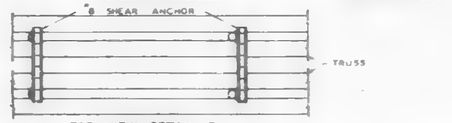
NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" ± FILLET WELDS

A = 1/4" B = 1/8"

FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 22300

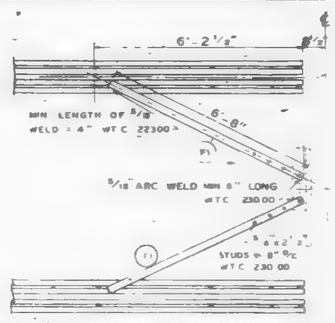


DETAIL "B" WHEN APPLICABLE DETAIL B1 WHEN APPLICABLE



TOP VIEW - DETAIL B

SECTION A-A END SUPPORT ANGLES

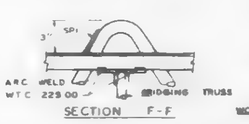


TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 223 00

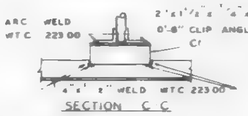
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	REF DRWG
FLOOR TRUSSES	T1E	6	C32TIE - 59-3"	ST20E
BRIDGING TRUSSES	T11	1	2' - 10' - 11"	BT2-1
	T12	3	12 - 10' - 11"	6 212
3"x2"x1/4" ANGLES		8	3"x2"x1/4"x 10	ST 400
	A2	4	3"x2"x [illegible] x 5'-11 15/16"	ST480
	A3	2	3"x2"x [illegible] x 5'-11 1/2"	ST 400
DIAGONAL FLATS	F1	6	1 1/2" x 5/8" x 6'-8"	ST 400
SPLICE PLATES	SP1	2	2" x 1/4" x 0'-8"	CD20
	SP2	2	3" x 5/8" x 0'-4 1/2"	CD20
	SP3	5	2" x 1/4" x 0'-8"	CD20
COVER PLATES	A	3	9" x .0135" x 13'-11 1/2"	ST303
	B	6	9" x .0135" x 15'-2"	ST303
	C	3	8" x .0135" x 13'-2 1/2"	ST303
	D	3	9" x .0135" x 1'-8"	ST303
ANGLE CLIPS	C1	21	8" x 1 1/2" x 1/4" x 0'-8"	CD20
7/8" ℄ SHEAR ANCHOR	SA	8	7/8" ℄ REBAR x 0'-8"	CD20
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 5/8" x 3'-7 7/8"	ST298
	DUS-2	1	3 1/2" x 3 1/2" x 5/8" x 3'-7 7/8"	ST298
CONNECTION BAR	CB	10	5/16" x 6" x 0'-8"	CD20
CLOSURE UNIT	BC	3	2 x 1 1/2" x 1 1/2" x 230 x 6'-4"	BT212 CD204

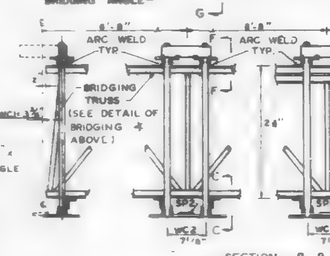
SECTION G-G



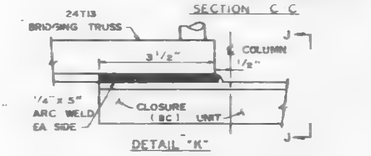
SECTION F-F



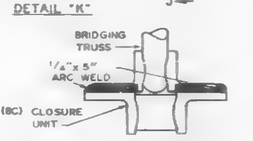
SECTION C-C



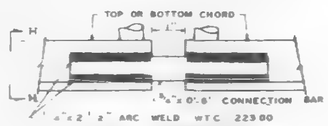
SECTION B-B



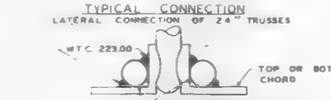
DETAIL "K"



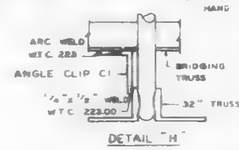
SECTION J-J



TYPICAL CONNECTION LATERAL CONNECTION OF 24" TRUSSES

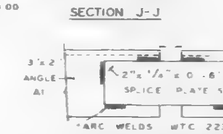


SECTION H-H

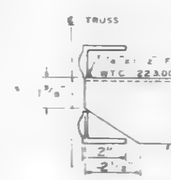


DETAIL "H"

REF DRWG		
7 AB4 3 & 3 1	1 3 68
7 AB4 15 & 6	3 68
7 AB4 35 4	3 56
SA 124	[illegible]
7 AB3 2	1 3 68
7 AB1 2	2 5 68
7 AB2 6 & 7	2 5 68
7 AB4 4	4-1 68



TYPICAL CONNECTION LATERAL CONNECTION OF 3"x2" ANGLES



DETAIL "J" END SUPPORT ANGLE ATTACHMENT

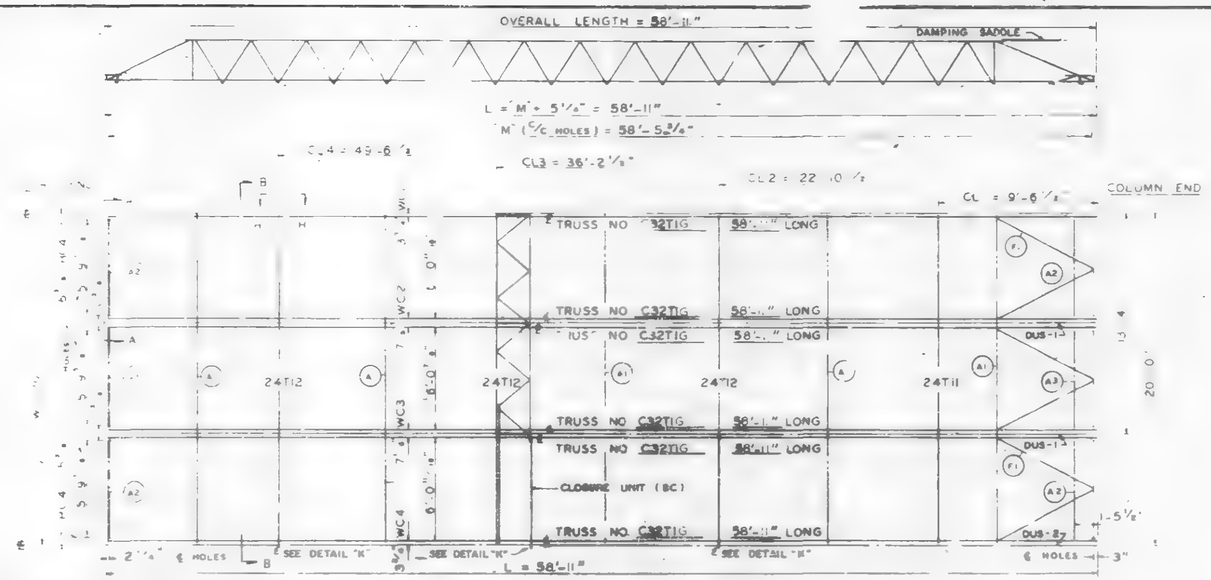
RECEIVED

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-11 (NORTH & SOUTH)

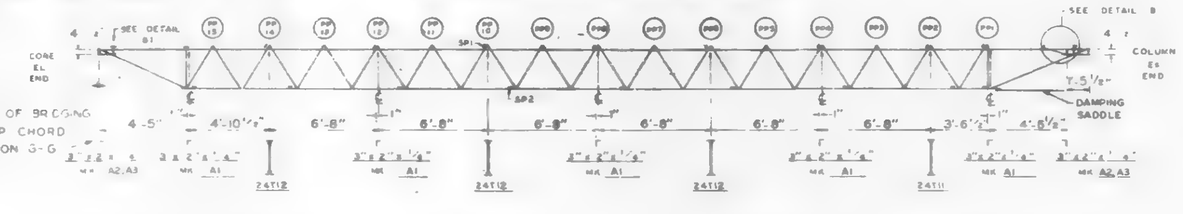
PANEL C1E 20'-0" x 59'-3"

FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-7 4-1-68 PLATE	
APPROVED FOR FABRICATION BY ____ FOR PONYA	DATE	DRAWN BY [illegible] DATE APRIL 10, 1968	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY J.R.PAUL DATE APRIL 10, 1968	IN CHARGE OF PROD DEV
LACLEDE STEEL CO. DETAILED BY A.E. WINKA		FABRICATION CONT. NO. W.T.C. 221	SHEET NO FP C1E



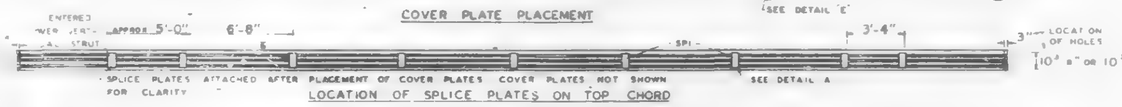
C & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

PANEL NO. C1G SIZE 20'-0" x 58'-11"



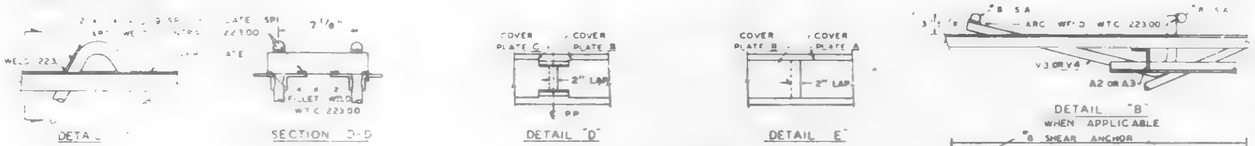
ELEVATION OF BRIDGING BELOW TOP CHORD SEE SECTION G-G

COVER PLATE PLACEMENT

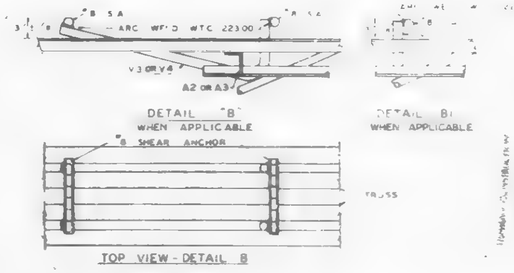


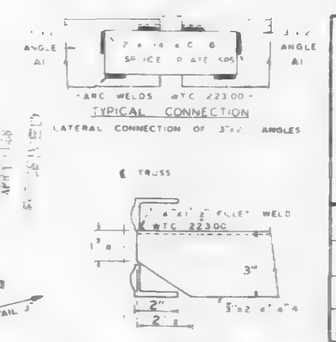
LOCATION OF SPLICE PLATES ON TOP CHORD

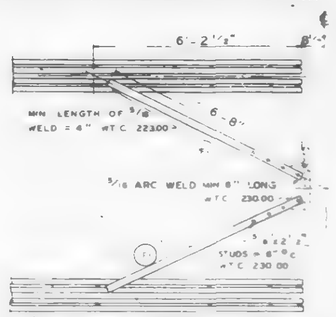
LOCATION OF SPLICE PLATES ON BOTTOM CHORD



NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" ℄ FILLET WELDS



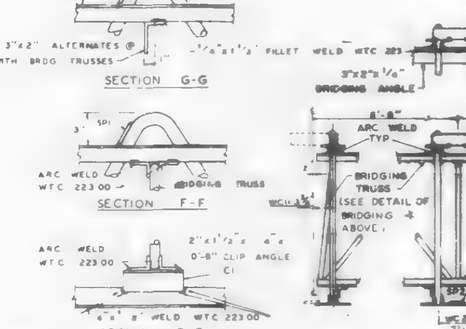


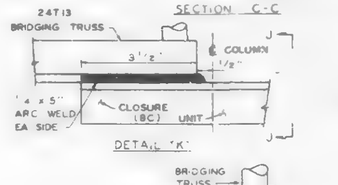


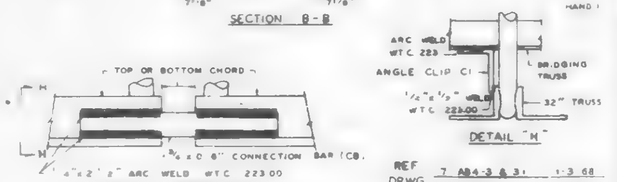
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 223 00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				REF DWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1G	6	C32TIG - 58'-11"	ST206
BRIDGING TRUSSES	T11	1	24" - 19'-11"	BT211
	T12	3	12" - 19'-11"	BT212
3"x2"x1/4" ANGLES	A1	8	3"x2"x1/4" x 5'-11 1/2"	ST400
	A2	4	3"x2"x1/4" x 5'-11 1/2"	ST400
	A3	2	3"x2"x1/4" x 5'-11 1/2"	ST400
DIAGONAL FLATS	T1	6	1 1/2"x 5/8" x 8'-8"	ST 400
SPLICE PLATES	SP1		2"x1 1/4"x 0'-8"	CD20
	SP2	27	3"x 5/8"x 0'-4 1/2"	CD20
	SP3	5	8"x1/4"x 0'-8"	CD20
COVER PLATES	A	3	8"x.033"x 18'-11 1/2"	ST303
	B	6	8"x.033"x 19'-2"	ST303
	C	3	8"x.0138"x 18'-2 1/2"	ST303
	D	3	8"x.033"x 1'-0"	ST303
ANGLE CLIPS	C1	21	3"x3"x5/16"x1/4"x0'-6"	CD201
3/4" ℄ SHEAR ANCHOR	SA	9	3/4" ℄ REBAR x 0'-6"	CD201
DAMPING SADDLE	DUS1	2	3 1/2"x3 1/2"x 3/8"x2'-7 3/8"	ST298
	DUS2	1	3 1/2"x3 1/2"x 3/8"x2'-7 3/8"	ST298
CONNECTION BAR	CB	10	5/16" ℄ x 0'-8"	CD201
CLOSURE UNIT	BC	3	2 @ 1 1/2"x 1 1/4"x 230 x 6'-4"	BT212







REF DWG		
7 AB4-3 & 31	1-3 68
7-AB4-15 & 16	1-3 68
7 AB4 39-41	1-3-68
SA 124	10-20 67
7-AB3-2	1-3-68
7-AB 2	2 15 68
7-AB2 6 & 7	2 15 68
7-AB4-42	4-1-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 39-40 (NORTH & SOUTH)

PANEL C1G - 20'-0" x 58'-11"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO 7-AB3-7 4-1-68 PLATE

APPROVED FOR FABRICATION BY ——— FOR P.O.N.Y.A. DATE

DRAWN BY [illegible] DATE APRIL 10, 1968

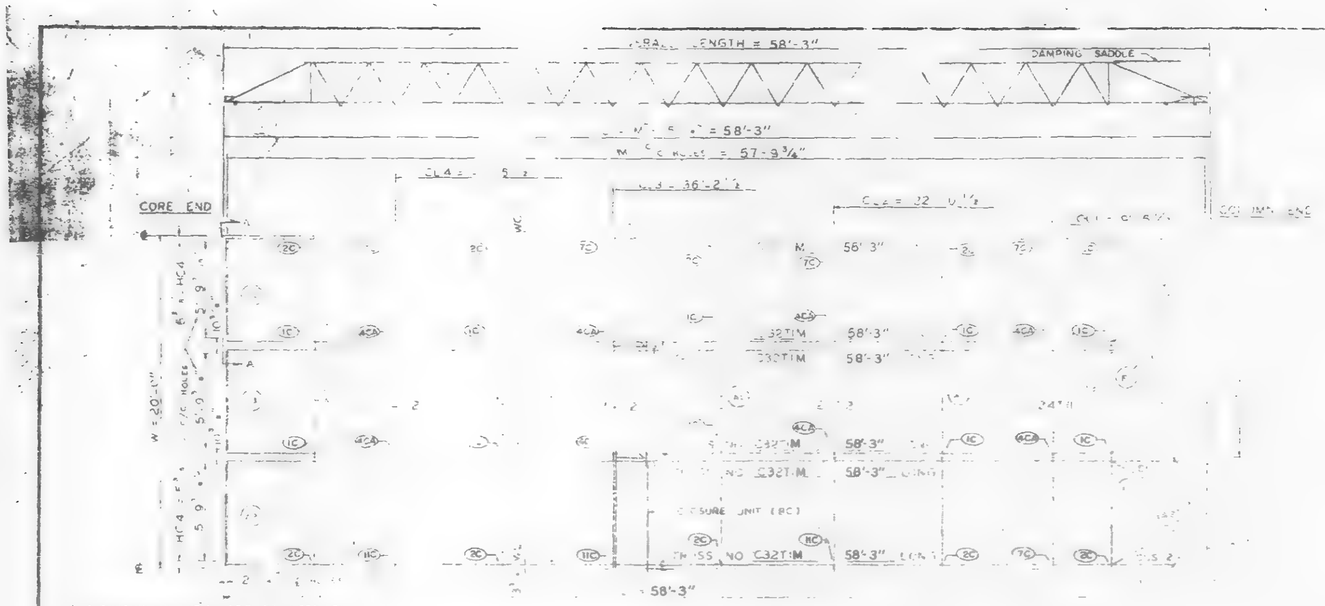
APPROVED FOR FABRICATION BY ——— FOR FABRICATOR DATE

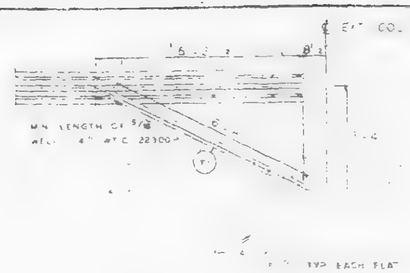
CHECKED BY J.R. PAUL (IN CHARGE OF PROD DEV) DATE APRIL 10, 1968

LACLEDE STEEL CO. DETAILED BY A.C. WEBER

FABRICATION CONT NO. WTC 221

SHEET NO. FP C1G



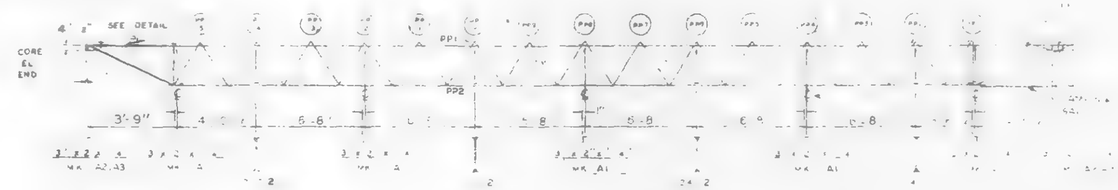


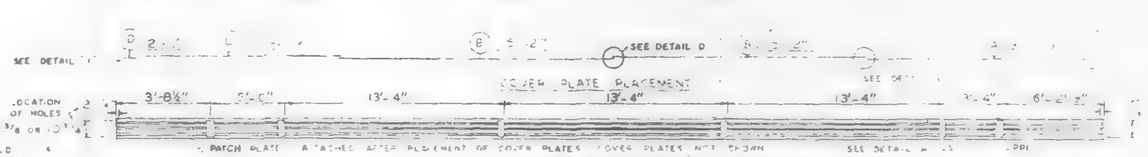
REQUIRED MATERIAL FOR FABR.				
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1	4	C32T1M 58'-3"	
	T2		24T11 [illegible]	
BRIDGING TRUSSES		3	24T1 [illegible]	ST [illegible]
				ST 403
				403
				ST 402
				ST 402
				ST 406
				[illegible]
				ST 303
				ST 303
				ST 408
				ST 303
				ST 400
				[illegible]
				ST 400
				ST 208
				ST 208
CONNECTION BAR	CB1	4	1 [illegible] x 1'-3"	ST 400
CLOSURE UNIT	BC1	3	2 [illegible] x 1¼" x 230 x 8'-6 6"	ST 212 CD 204
CONNECTION PLATES	P1	5	3'-2" x 3/8" x 0'-6 1"	ST 400
	P2	4	4'-8" x .38" x 0'-9"	ST 400
	P3	1	4'-8" x .38" x 1'-0"	ST 400

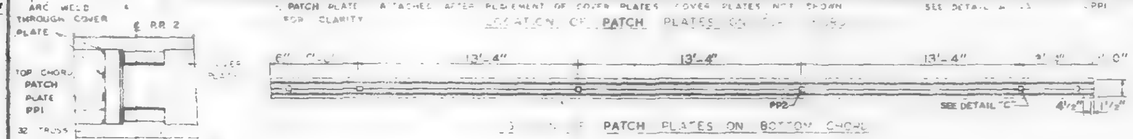
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-2" ABOVE COLUM. CLIPS FOR TRUSS BEARING.

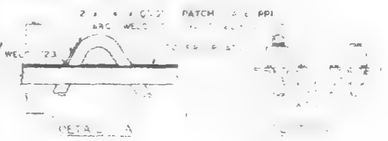
℄ & DIMENSION HC4 ARE RELATED TO [illegible] BEARING END OF FLOOR TRUSSES WHICH ARE NOMINAL WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

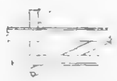
BUILDING NO. C.M SIZE 20'-0" x 58'-3"

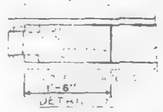












PATCH PLATE MK PP2

UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" ± 1" MIN. FILLET.

LETTERS AND NUMBERS IN [illegible] REFER TO CONNECTION DETAILS SHOWN ON SHEET CT 201, CT 202 OR CT 204.

NO	DATE	REVISION	BY

[illegible]	A83 3.31	1-3-69
[illegible]	A84 15 & 16	7-22-68
[illegible]	A84 39 & 41	7-22-68
[illegible]	[illegible]	10-11-68
[illegible]	2	1-3-69
[illegible]	[illegible]	7-26-68
[illegible]	A8 5 & 7	7-22-68
[illegible]	[illegible]	10-15-68

[illegible] AUTHORITY

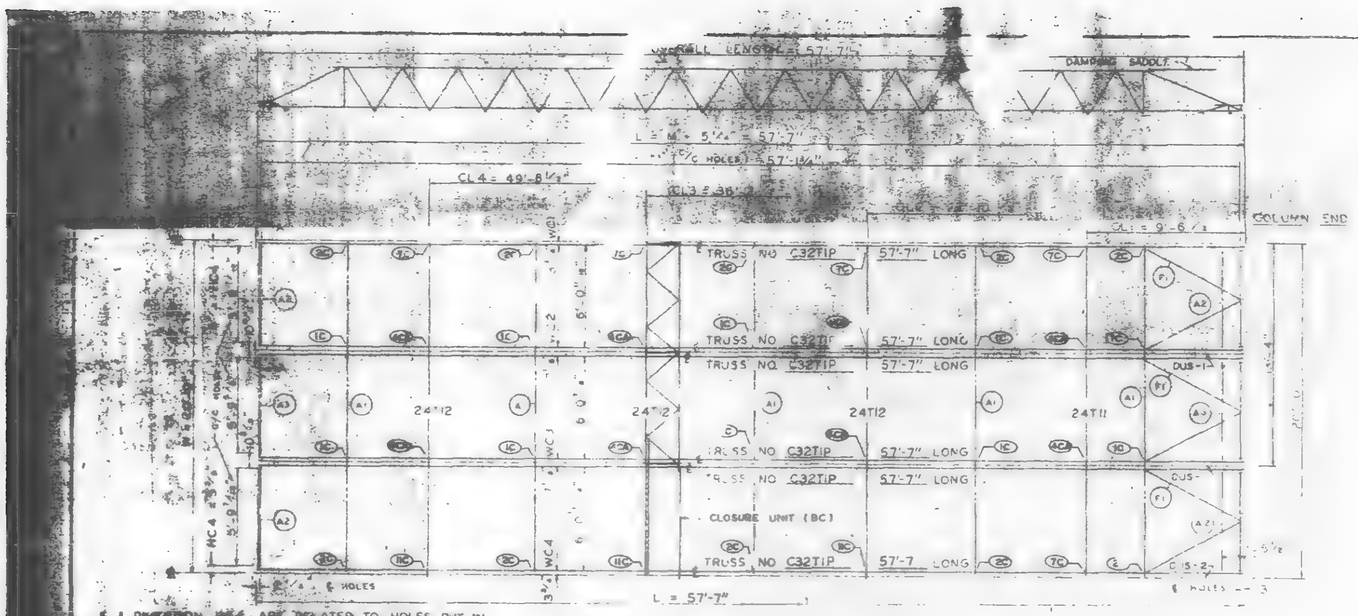
72.73 (N)

[illegible] M REVISED 58'-3"

COMPANY:

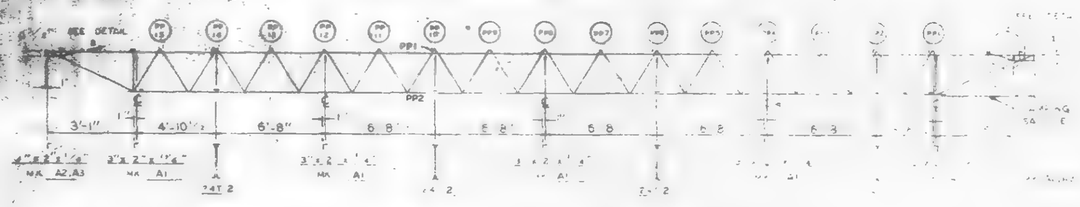
[illegible] 22-68 PLATE

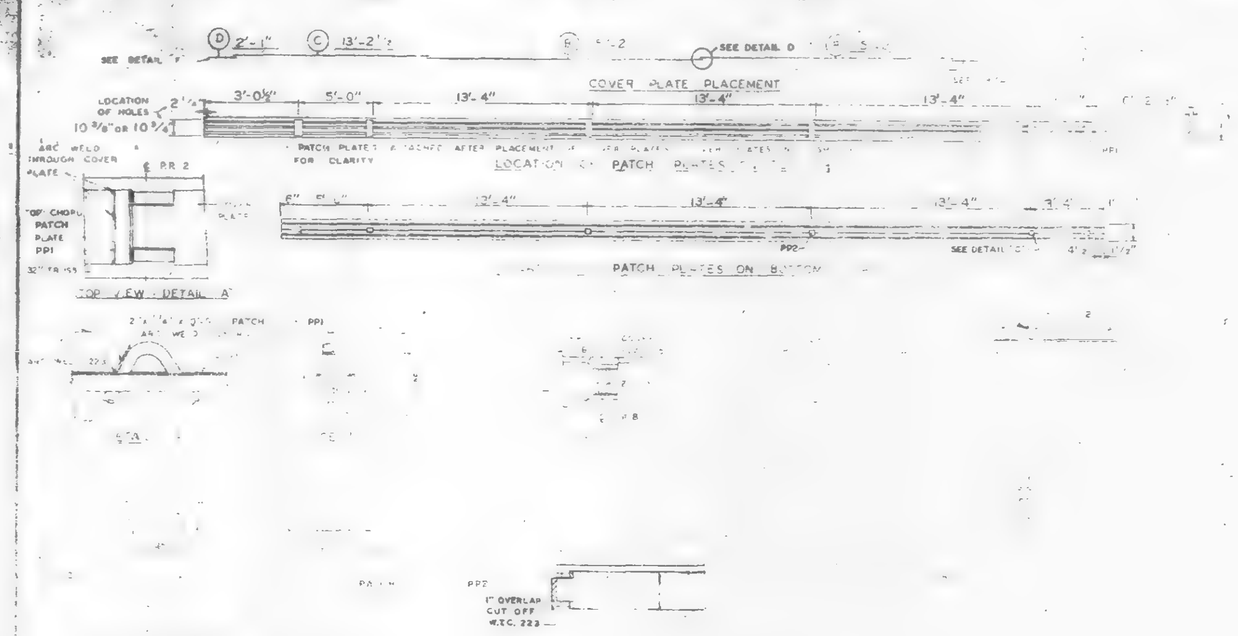
FOR PONTA	11/7/68	DRAWN BY	
FABRICATOR	DATE	DATE 10-24-68	
		CHECKED BY T.M.	DRAWN CHARGE DESIG. DEV.
CO.		DATE 10-24-68	
		FABRICATION CONT. NO. 221	SHEET NO. FB-1M

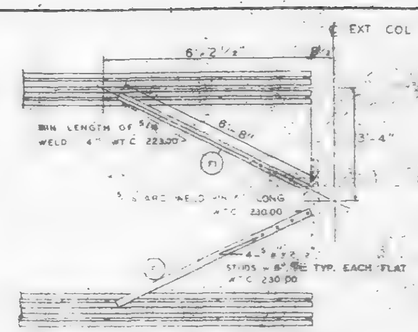


& DIMENSIONS WC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

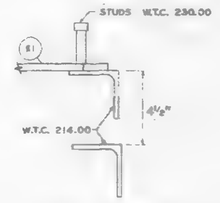
PANEL NO CIP SIZE 20'-0" x 57'-7"







TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL				
MATERIAL	MK	PCS		REF
FLOOR TRUSSES	T12	6	C32TIP	ST
BRIDGING TRUSSES	T11	1	24T11	
	T12	2	24T12	
4"x 2"x¼" ANGLE	A1	5	3'-5" x 3½" x ¼"	ST 300
	A2	4	3'-[illegible]	ST 300
	A3	2	4"x 4" x 5'-10"	ST 300
DIAGONAL FLATS	F1	2	1'-6" x 3½" x ¼"	ST 300
PATCH PLATES	C	18	2'-6" x 7½" x 0'-0"	ST 300
	PP2	18	3" x 1'-0"	ST 300
COVER PLATES	A	3	9"x 2'-3" x [illegible]	ST 300
	B	5	9" x 1'-0½" x 18'-5"	ST 300
	C	3	9" x 1'-3½" x 13'-2"	ST 300
ANGLE CLIPS	CL	21	2"x1½"x¼" x 0'-0"	ST 400
¾" ø SHEAR ANCHOR	SA2	9	¾" ø STUD x 6'-0"	W 400
STIFFENING SADDLE	DUS-2	2	3½"x3½"x¾"x3'-8½"	ST 300
	DUS-1	1	3½"x3½"x⅜"x3'-8½"	ST 300
CONNECTION BAR	CB1	4	1"ø x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2'-3½" x 1'-6" x [illegible]	ST 300
			230 x 5'-6½"	CO 300
CONNECTION PLATES	P1	5	3½" x ⅜" x 0'-6½"	ST 300
	P2	4	4½" x .38" x 0'-9"	ST 400
	P3	1	4½" x .38" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES (E.G. [illegible]) INDICATE CONNECTION DETAILS SHOWN ON SHEE[illegible] OF 102 OR 103 OF 104.

NO	DATE	REVISION	BY

3 68
A 5 7-22-68
3B & 4) 7-22-68
C 1 68
3-68
7-22-68
7-22-68
10 15 68

74 (N)

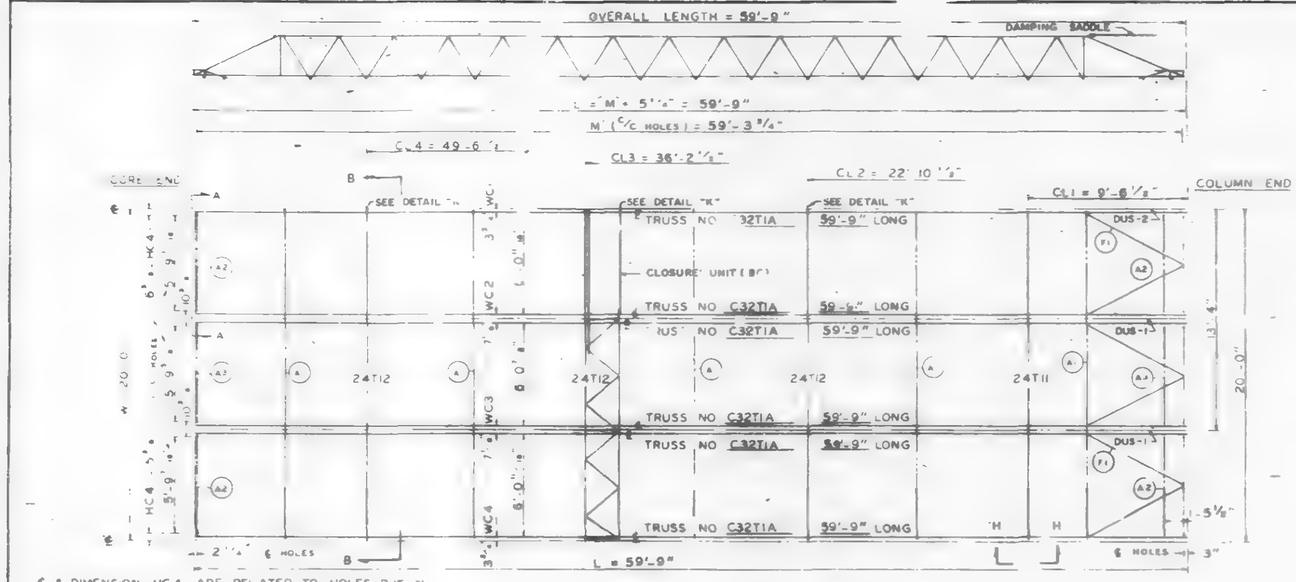
P 57'-7"

11/7/68

E 58

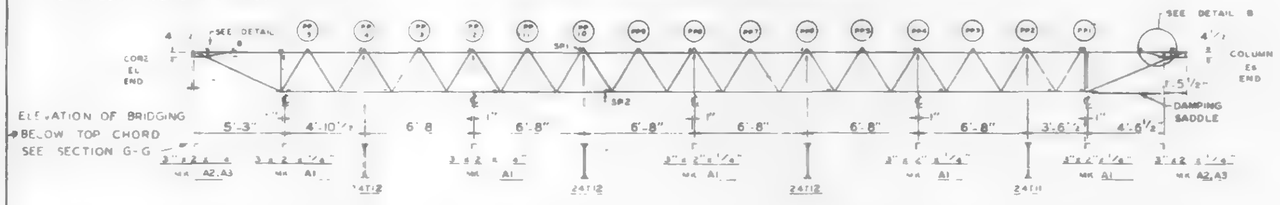
YTM OF [illegible] ENGINE OF [illegible] OFW

[illegible] VLP

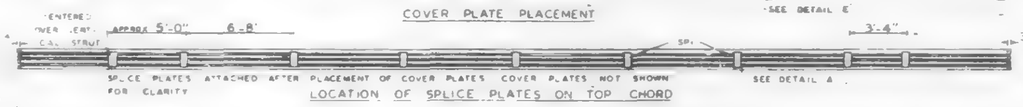


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

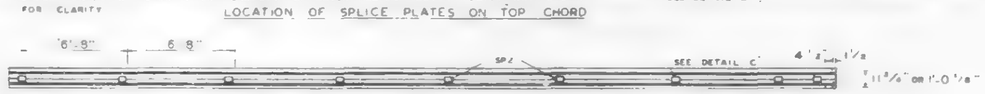
PANEL NO CRIA SIZE 20'-0" x 59'-9"



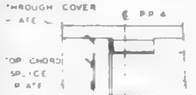
COVER PLATE PLACEMENT



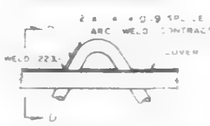
LOCATION OF SPLICE PLATES ON TOP CHORD



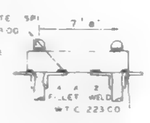
LOCATION OF SPLICE PLATES ON BOTTOM CHORD



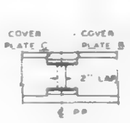
TOP VIEW - DETAIL A



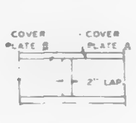
DETAIL A



SECTION D-D



DETAIL D

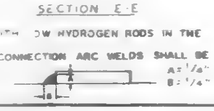


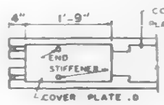
DETAIL E

DETAIL F

SECTION E-E

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1 FILLET WELDS

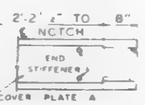




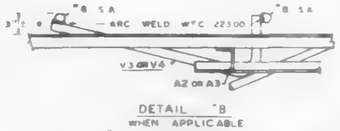
DETAIL F

COVER PLATES 20 GA THICK

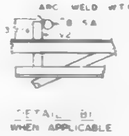
FIELD PUNCH COVER PLATES OVER END STIFFENERS, WTC 22300



DETAIL G



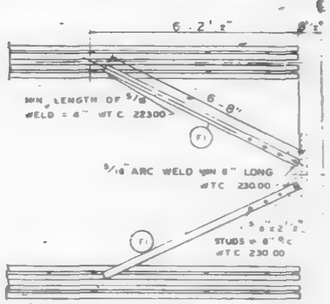
DETAIL "B" WHEN APPLICABLE



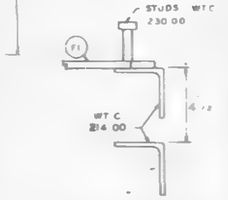
DETAIL B1 WHEN APPLICABLE

TOP VIEW - DETAIL B

SECTION A-A
END SUPPORT ANGLES

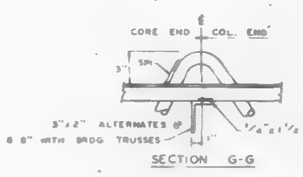


TYPICAL - PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 223 00



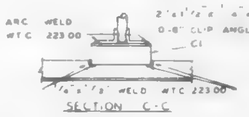
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK	PCS	SIZE	DRWG
FLOOR TRUSSES	T1A	6	C32T1A - 59'-9"	ST20IA
BRIDGING TRUSSES	T11	1	2 - 18'-11"	BT211
	T12	3	12 - 19'-11"	BT212
		5	3"x2"x 1/8"x 18'-11"	ST 400
3"x2"x1/8" ANGLE	A2	4	3"x2"x 1/8"x 5'-11 1/2"	ST 400
	A3	2	3"x2"x 1/4"x 5'-11 1/2"	ST 400
DIAGONAL FLATS	F1	6	1 1/8"x 5/8"x 6'-8"	ST 400
SPLICE PLATES	SP1		2"x 1/4"x 0'-9"	CD20
	SP2	27	3"x 5/8"x 0'-4 1/2"	CD 20
	SP3	5	2"x 1/4"x 0'-6"	CD20
COVER PLATES	A	3	9"x.0135"x13'-11 1/2"	ST303
	B	6	9"x.0135"x 15.2	ST 303
	C	3	9"x.0135"x13'-2 1/2"	ST 303
	D	3	9"x.0135"x 1'-9"	ST 303
ANGLE CLIPS	C1	24	2"x1 1/8"x 1/4"x0'-6	CD201
7/8" ℄ SHEAR ANCHOR	BA	12	7/8" ℄ REBAR x 0'-9"	CD 20
DAMPING SADDLE	DUS-1	2	3 1/8"x3 1/8"x 5/8"x3'-7 5/8"	ST298
	DUS-2	1	3 1/8"x3 1/8"x 5/8"x3'-7 5/8"	ST298
CONNECTION BAR	CB	10	5/8" ℄ x 0'-6"	CD201
CLOSURE UNIT	BC	3	2 - 4 1/8"x 1 1/4 x 230 x 6'-4"	BT212 CD 204

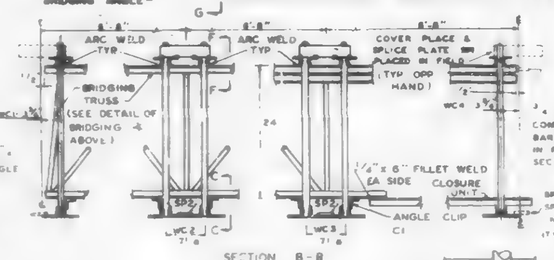


SECTION G-G

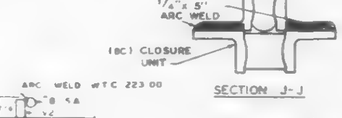
SECTION F-F



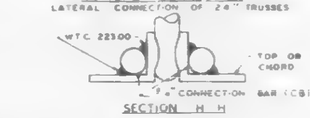
SECTION C-C



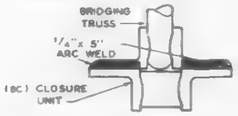
SECTION B-B



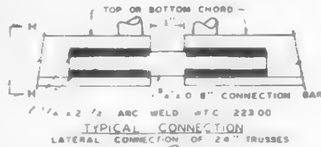
DETAIL "K"



DETAIL H



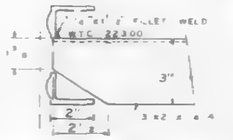
SECTION J-J



TYPICAL CONNECTION LATERAL CONNECTION OF 24" TRUSSES

SECTION H-H

TYPICAL CONNECTION LATERAL CONNECTION OF 3"x2" ANGLES



DETAIL J
END SUPPORT ANGLE ATTACHMENT

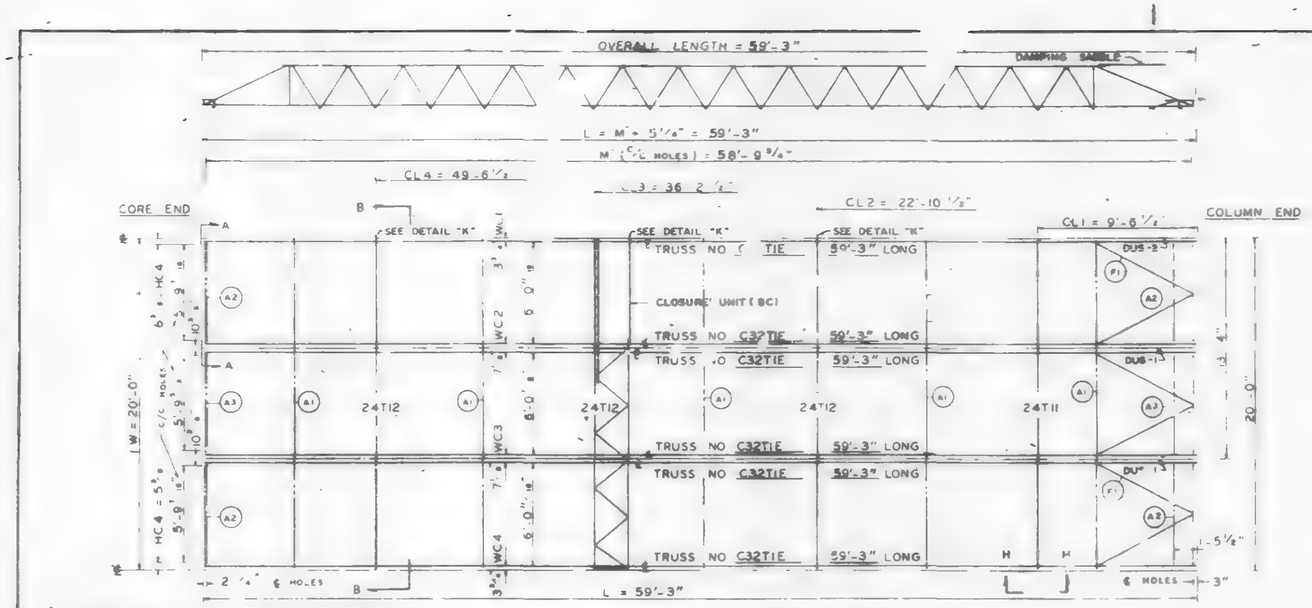
REF DRWG		
7-AB4 3 & 3		3 68
7-AB4-15 & 6		3 6H
7-AB4 39-41		3 5P
SA 124		C 20
7-AB3 2		1 3 6H
7-AB1 2		2 15 68
7-AB2 6 & 7		2 15 68
7-AB4-42		4-1-68

VOID

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

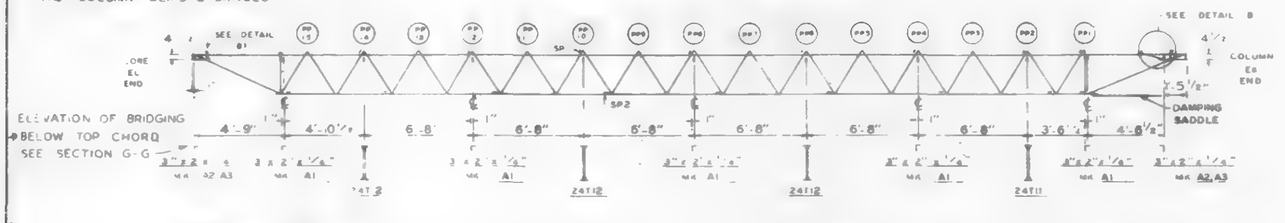
BLDG A FLOORS 12-24, 26-38 (NORTH & SOUTH) 43-58, 60-66
68-69 (NORTH) PANEL CRIA - 20'-0" x 59'-9

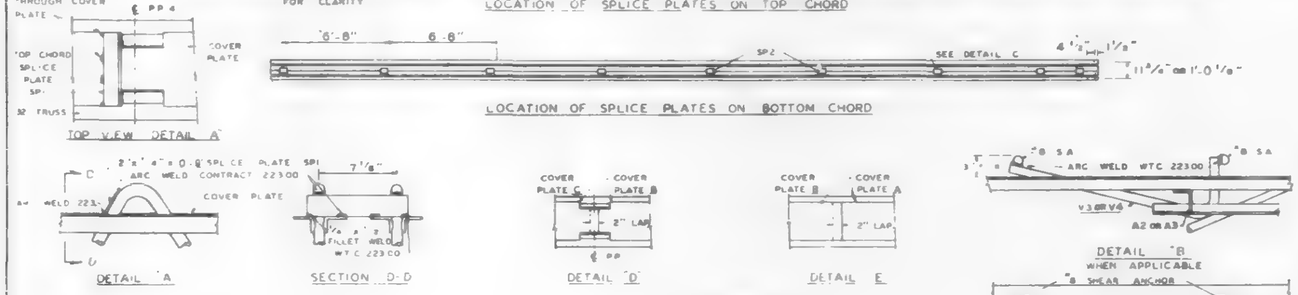
FABRICATION BY: LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-7 4-1 68	PLATE
APPROVED FOR FABRICATION BY FOR PONYA	DATE	DRAWN BY	
		DATE APR. 10, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY J.R.PAUL	IN CHARGE OF PROD DEV
		DATE APR. 10, 1968	
DETAILED BY R.E. WEBER		FABRICATION CONT. NO. W.T.C 221	SHEET NO FP-CRIA



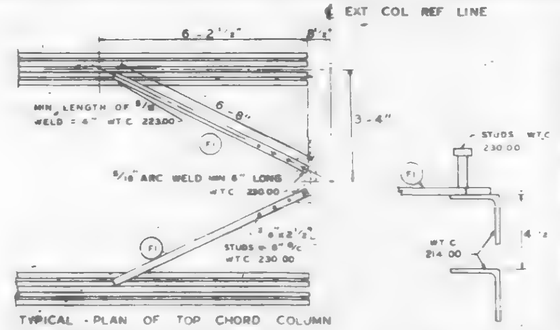
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

PANEL NO. CRIE SIZE 20'-0" x 59'-3"

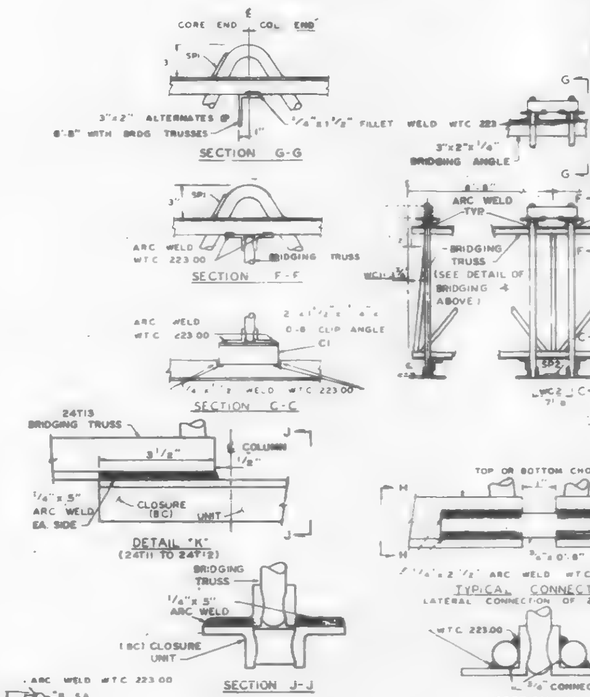




NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FILLET WELDS



REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	TIE	6	C32TIE - 59'-3"	ST204E
BRIDGING TRUSSES	T11	1	24" [illegible]	BT211
	T12	3	24" [illegible]	BT212
		3	3"x2"x1/4 x [illegible]	ST [illegible]
3"x2"x1/4 ANGLE	A2	4	3"x2"x1/4 x 5'-11 15/16"	ST400
	A3	2	3"x2"x1/4 x 5'-11 7/8"	ST400
DIAGONAL FLATS	F1	6	1'-2"x 3/8"x 6'-8"	ST402
SPLICE PLATES	SP1	2	2'-3"x1/4 x [illegible]'-9	CD20
	SP2	2	3'-3" x 0'-4"	CD20
	SP3	5	2'-3" x 0'-6"	CD20
COVER PLATES	A	3	9"x.035" x 13'-11 1/2"	ST303
	B	6	9"x.0185"x 15'-2 1/2"	ST303
	C	3	9"x.0185"x13'-2 1/2"	ST303
	D	3	9"x.0185"x 1'-9"	ST303
ANGLE CLIPS	C1	21	2"x1 1/2"x1 1/4"x0'-6"	CD201
3/4" ℄ SHEAR ANCHOR	SA	9	3/4" ℄ REBAR x 0'-8"	CD20
DAMPING SADDLE	DUS-1	2	3 1/2"x3 1/2"x 5/8"x3'-7 5/8"	ST298
	DUS-2	1	3 1/2"x3 1/2"x 5/8"x 3'-7 5/8"	ST298
CONNECTION BAR	CB	10	3/4" ℄ x 0'-6"	CD20
CLOSURE UNIT	BC	3	2'-4"x1 1/2"x 1 1/4"x [illegible]	BT212
			230 x 6'-4"	CD204



REF DRWG		
7-AB4 3 & 31	1-3-68
7-AB4 15 & 6	1-3-68
7-AB4 39-41	3-68
SA 124	10-20-67
7-AB3-2	1-3-68
7-AB1-2	2-15-68
7-AB2-6 & 7	2-15-68
7-AB4-42	4-1-68

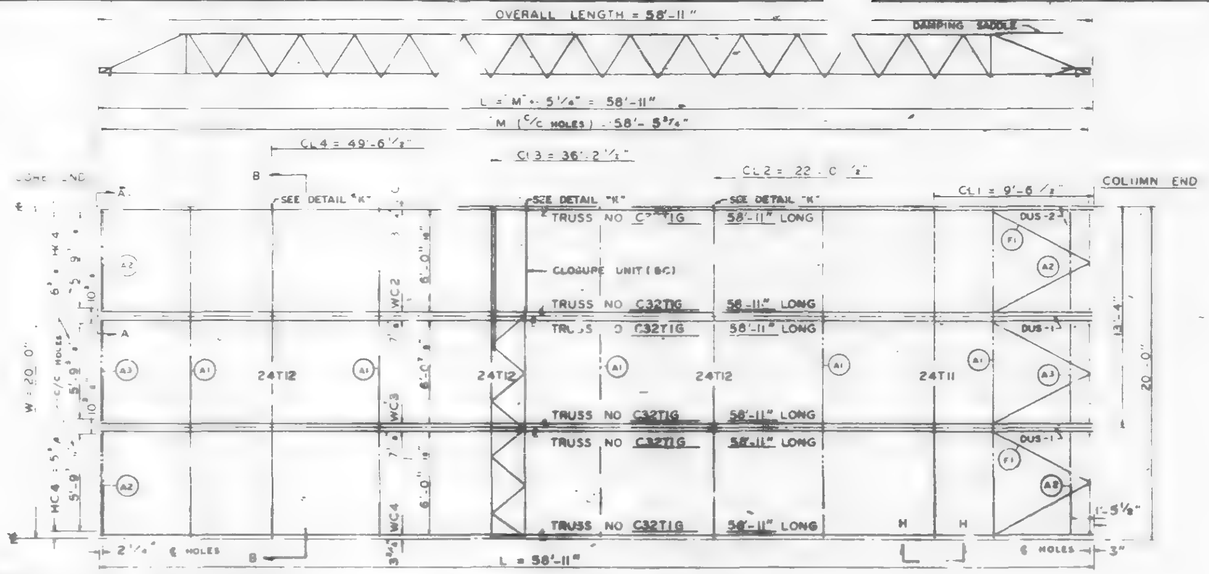
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-11 (SOUTH)

PANEL CRIE - 20'-0" x 59'-3

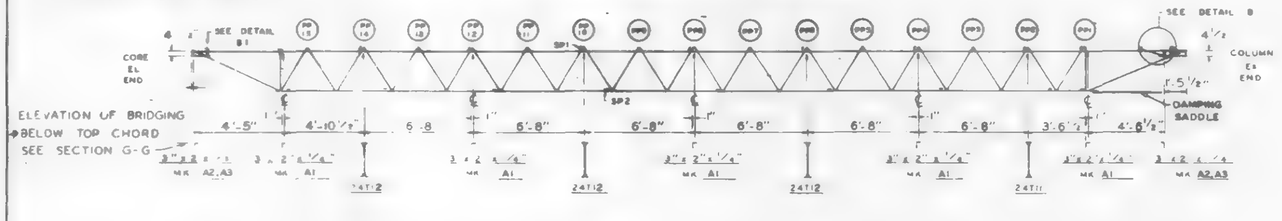
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3 7 4-1-68	PLATE
APPROVED FOR FABRICATION BY - FOR PONYA	DATE	DRAWN BY DATE APR. 10, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY J.R.PAUL DATE APR. 10, 1968	IN CHARGE OF PROD DEV.
LACLEDE STEEL CO. DETAILED BY A.C. WEBER		FABRICATION CONT. NO. WTC 221	SHEET NO FP-CRIE



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

PANEL NO. CRIG SIZE 20'-0" x 58'-11"

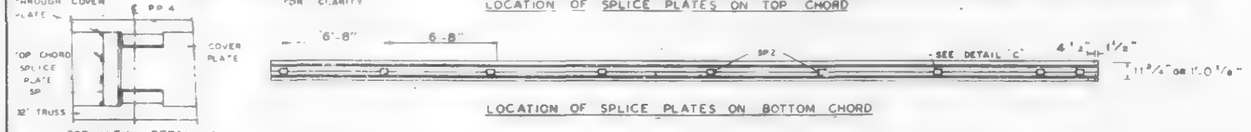


ELEVATION OF BRIDGING BELOW TOP CHORD SEE SECTION G-G

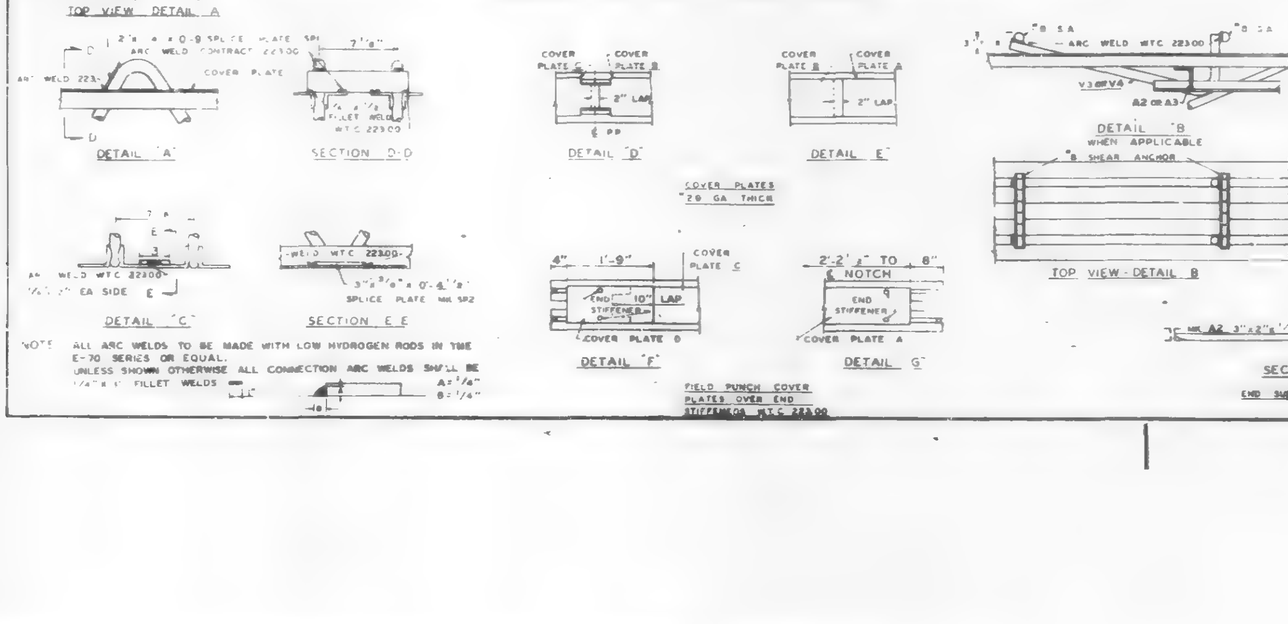
COVER PLATE PLACEMENT

SPLICE PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

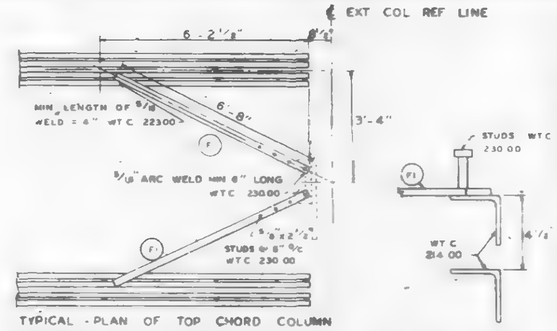
LOCATION OF SPLICE PLATES ON TOP CHORD



LOCATION OF SPLICE PLATES ON BOTTOM CHORD



NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 6" FILLET WELDS

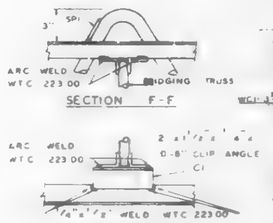


TYPICAL - PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 223.00

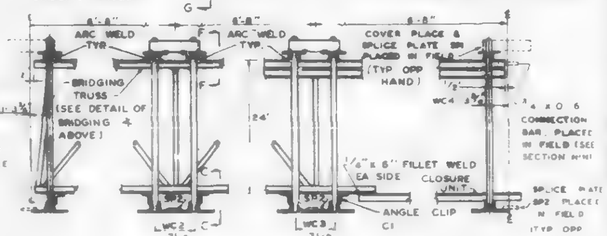
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	TIG	6	C32TIG - 58'-11"	ST2016
BRIDGING TRUSSES	TI1	1	24T 19'-11"	BT211
	TI2	3	2[illegible] 19'-11"	T212
3"x2"x1/4" ANGLE	A1		3"x2"x1/4"x 19'-[illegible]	ST 4[illegible]
	A2	4	3"x2"x1/4" 5'-11 5/8"	ST 400
	A3	2	3"x2"x1/4"x 5'-11 5/8"	ST 400
DIAGONAL FLATS	F1	6	1 1/2"x 5/8"x 6'-8"	ST 400
SPLICE PLATES	SP1	27	"x 1/4"x 0'-9"	CD 20
	SP2	27	3"x 5/8"x 0'-4 1/8"	CD 20
	SPB	5	2"x 1/4"x 0'-6"	CD 20
COVER PLATES	A	3	9"x.0135"x 13'-11 1/2"	ST 303
	B	6	8"x.0135"x 15'-2"	ST 303
	C	3	8 x.0135"x 13'-2 1/8"	ST 303
	D	3	9"x.0135"x 1'-8"	ST 303
ANGLE CLIPS	C1	21	2"x1 1/2"x 1/4"x 0'-6	CD 20
5/8" ℄ SHEAR ANCHOR	SA	0	5/8" ℄ REBAR x 0'-9"	CD 20
DAMPING SADDLE	DUS-2	2	3 1/4"x3 1/2"x 5/8"x3'-7 5/8"	ST 298
	DUS-1	1	3 1/2"x3 1/2"x 5/8"x 3'-7 5/8"	ST 298
CONNECTION BAR	CB	10	5/8" ℄ x 0'-8"	CD 20
CLOSURE UNIT	BC	3	2 [illegible] /2"x 1 1/4" x	ST 212
			.230 x 6'-4"	CD 204

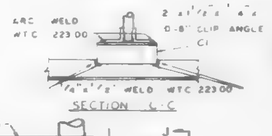
SECTION G-G



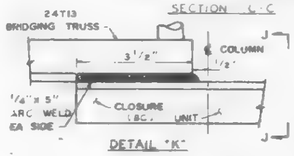
SECTION F-F



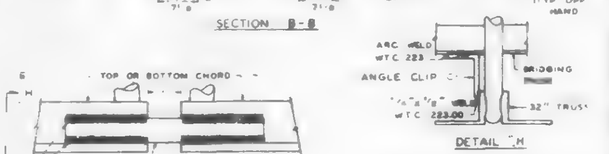
SECTION B-B



SECTION C-C

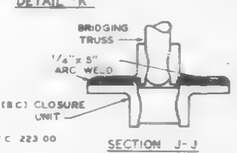


DETAIL "K"



TYPICAL CONNECTION
LATERAL CONNECTION OF 24" TRUSSES

SECTION H-H



SECTION J-J

DETAIL "M"

REF DRWG		
7-AB4-3 & 31	1-3-68
7-AB4-15 & 16	1-3-68
7-AB4-39 41	3-68
SA 124	C 20 67
7-AB3-2	1-3-68
7-AB1-2	2-15-68
7-AB2-6 & 7	2-15-68
7-AB4-42	4-1-68

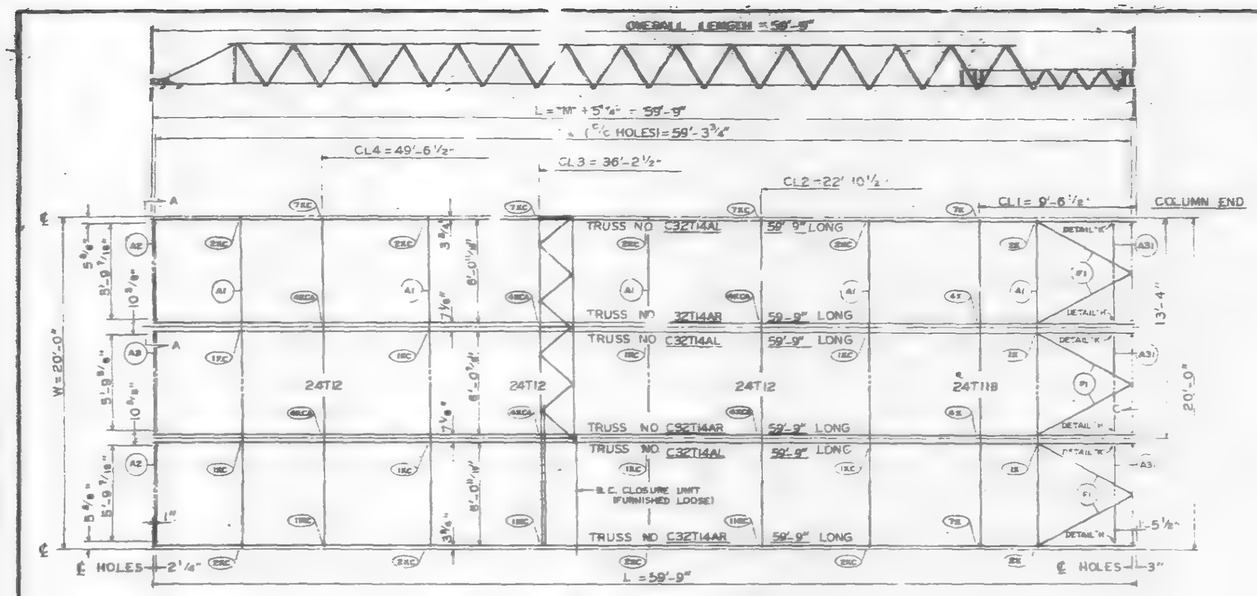
VOID

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

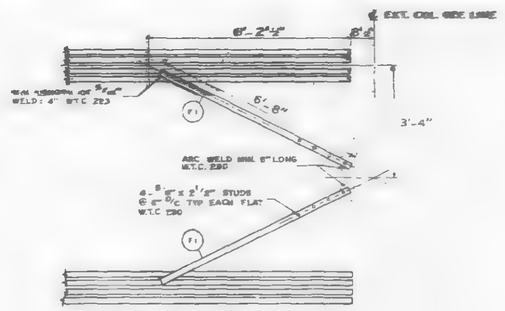
BLDG A FLOORS 10-11, 39 (NORTH) 39-40 (SOUTH)

PANEL CRIG - 20'-0" x 58'-11

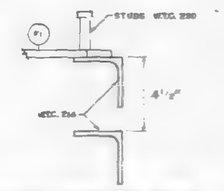
FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3 7	4-1-68 PLATE
APPROVED FOR FABRICATION BY — FOR PONYA	DATE	DRAWN BY	
		DATE APR. 10, 1968	
APPROVED FOR FABRICATION BY — FOR FABRICATOR	DATE	CHECKED BY J.R.PAUL	IN CHARGE OF PROD DEV
		DATE APR. 10, 1968	
DETAILED BY A.E. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO FP-CRIG



PANEL NO. C2A SIZE 20' x 59'-9"



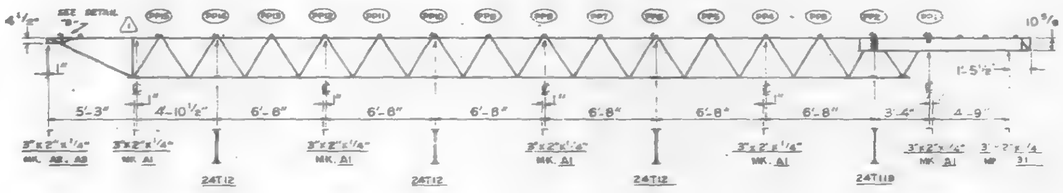
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

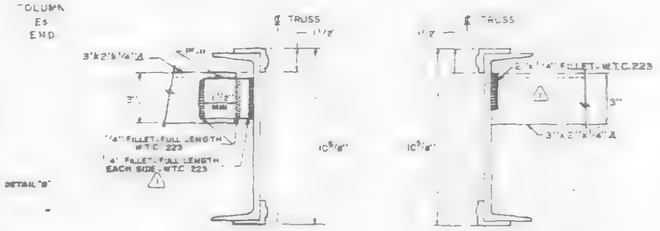


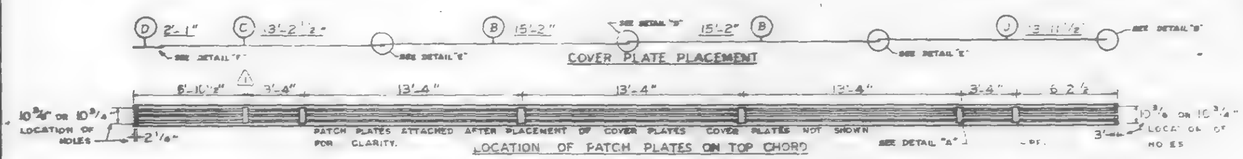
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

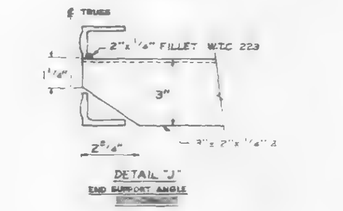
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DWG.
FLOOR TRUSSES	[illegible]	3	C32T14AL x 59'-9"	ST 214B
	[illegible]	3	C32T14AR x 59'-9"	ST 214 AL
BRIDGING TRUSSES	T11B	1	24T11B x [illegible]"	ST 211B
	T12	3	24T12 x 19'-11"	ST 212
CLOSURE UNIT	BC	3	1/2" ø 6'-8 1/2" LONG	ST 212
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 1'-4" x 19'-1"	ST 403
	A2	2	3"x 2"x 1'-4"x 5'-4"	ST 403
	A3	1	3"x 2"x 1'-4" x 2'-4"	ST 403
	A31	3	3"x [illegible] 4"x5'-8"x 8"	ST 410
CLOSURE PLATES	PP-11	2	3" x 1/4" x 0'-2 3/4"	ST 412
DIAGONAL FLATS	F1	6	2" x 5/16" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1'-4" x 0'-9"	ST 400
	PP2	18	3" x 3/16" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/4"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .0135" x 13'-11 1/8"	ST 304
ANGLE CLIPS	C1	21	2"x 1 1/2" x .25" x 0'-6"	ST 400
ø B SHEAR ANCHOR	SA2	6	ø 8 REBAR x 0'-8"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .38" x 0'-9"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400
	P8	8	3" x 1/2" x 4'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie (CB)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 82 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.







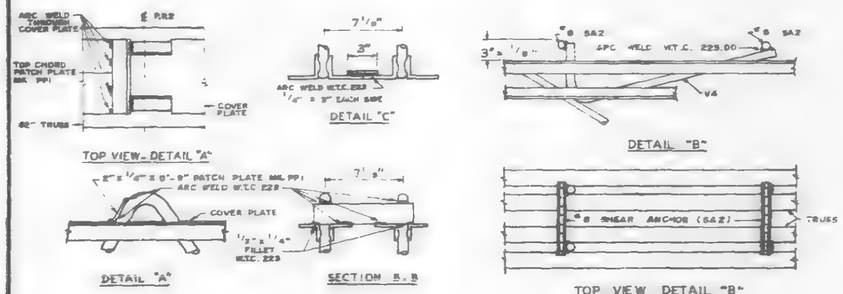


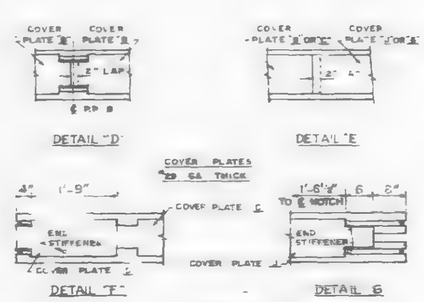
SECTION C-C
END SUPPORT ANGLE

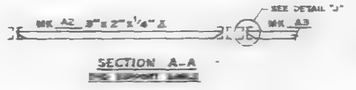
NO	DATE	REVISION	BY
1	2-4-69	AS NOTED	BDC

REF DRWG.

7-AB2-28	10-4-68
7-AC4-28	7-22-68
7-AB1-13	10-4-68
7-AB2-7	7-22-68
7-AB2-15	10-4-68







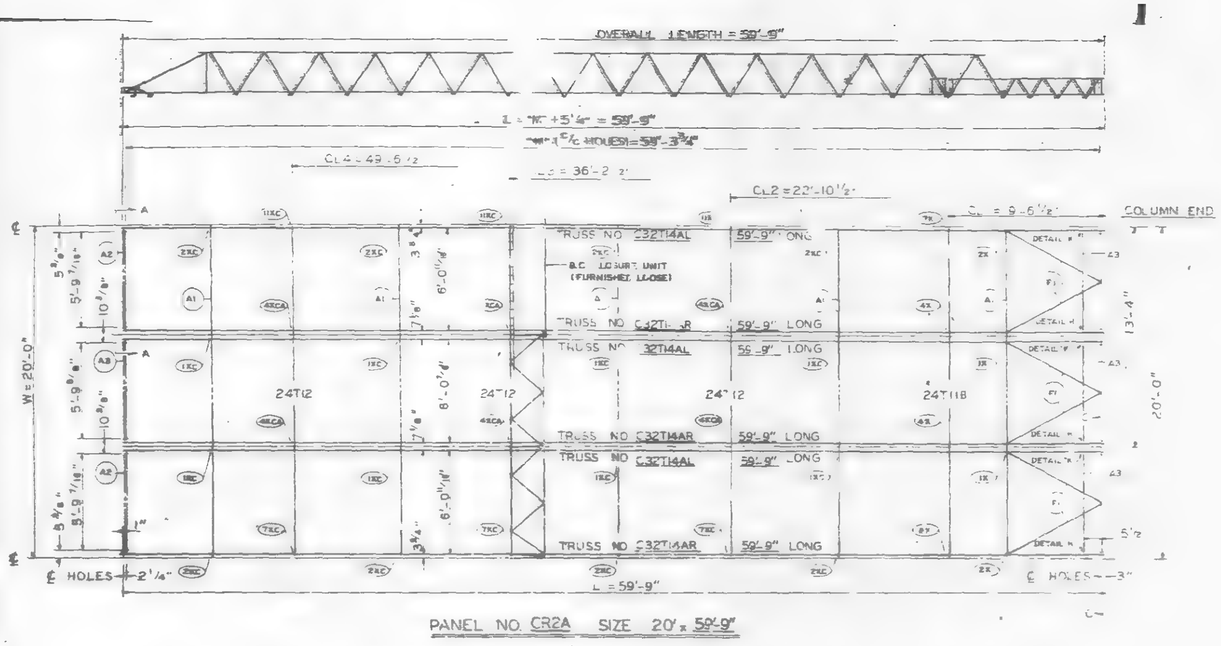
SECTION A-A

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

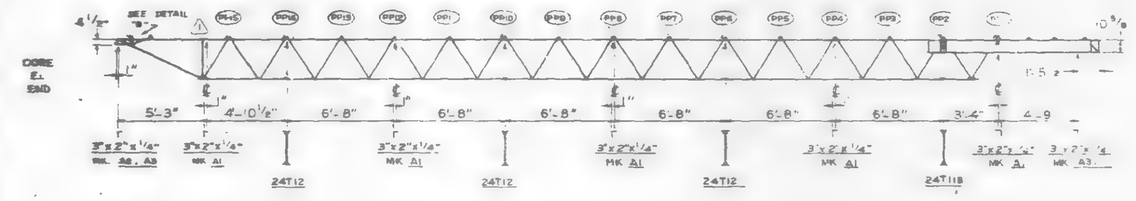
BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH) /1

PANEL C2A - 20' x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB3-28 PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A. DATE 4/28/69
DRAWN BY [illegible] DATE DEC. 5, 1968
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR DATE
CHECKED BY T.W. CHUBB DATE DEC. 5, 1968 IN CHARGE OF PROD. DEN
DETAILED BY A.C. WEBER
FABRICATION CONT NO W.T.C. 221
SHEET NO FP C2A



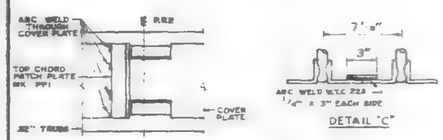
PANEL NO. CR2A SIZE 20' x 59'-9"



COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD

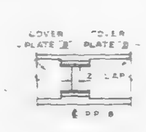
LOCATION OF PATCH PLATES ON BOTTOM CHORD



TOP VIEW - DETAIL "A"

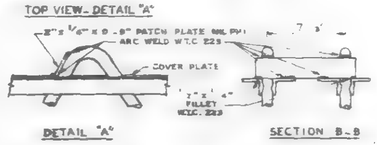
DETAIL "C"

DETAIL "B"



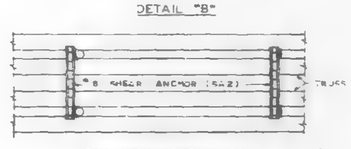
DETAIL "D"

DETAIL E

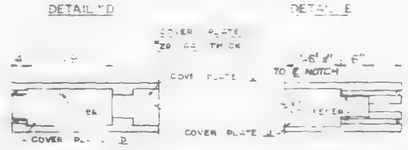


DETAIL "A"

SECTION B-B

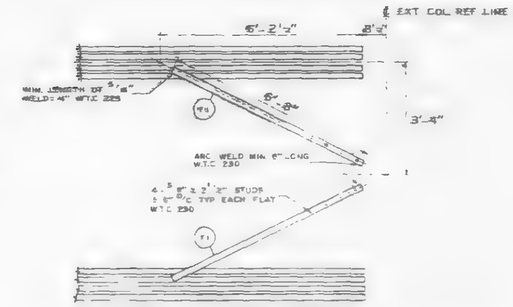


TOP VIEW DETAIL "B"

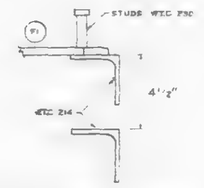


DETAIL F

DETAIL G



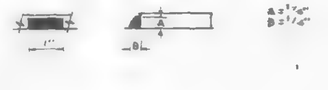
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS.	SIZE	DWNG.
FLOOR TRUSSES	THRU	3	C32T14AL x 59'-9"	ST 214AL
	THRU	3	C32T14AR x 59'-9"	ST 214AL
BRIDGING TRUSSES	THRU	1	[illegible]	218
	T12	3	24T12 x 19'-	212
CLOSURE UNIT	BC	3	1/4" - 6'-8 2/" JBE	ST 217
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 4"x 19'-1"	ST 40
	A2	2	3" 2"x 4"x 5'-11 3/8"	ST 403
	A3	1	3"x 2"x 1/4"x 5'-11 3/8"	ST 403
	A3!	3	3"x 2"x 4"x"	ST 410
CLOSURE PLATES	PC1	3	3" x 4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	6	1/2" x 3 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	6	2' x 1'-4" x 0'-8"	ST 400
	PP2	16	3 x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2	ST 303
	C	3	8" x .0135" x 15'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C	21	2"x1 1/2"x .25"x 0'-6"	ST 400
"B SHEAR ANCHOR	SA2	6	"B REBAR x 0'-8"	ST 400
CONNECTION BAR	CB1	5	1" B x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 2 3/4" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-8"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P9	6	3" x 1/2" x 1'-2"	ST 409

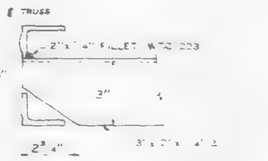
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS. E.g. (12)
ALL CONNECTION DETAILS FOR FLOORS 25, 50 & ROOF SHOWN ON SHEETS CD 210 THRU CD 228.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.



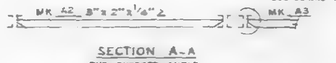
DETAIL K
END SUPPORT ANGLE ATTACHMENT

DETAIL M
END SUPPORT ANGLE ATTACHMENT

SECTION C-C
END SUPPORT ANGLE



DETAIL J
END SUPPORT ANGLE ATTACHED



SECTION A-A
END SUPPORT ANGLE

NO	DATE	REVISION	BY
1	12-4-69	AS NOTED	EDC

REF DRWG.

7-AB3-29	10-4-68
7-AB4-28	7-22-68
7-AB1-13	10-4-68
7-AB2-7	7-22-68
7-AB2-15	10-4-68

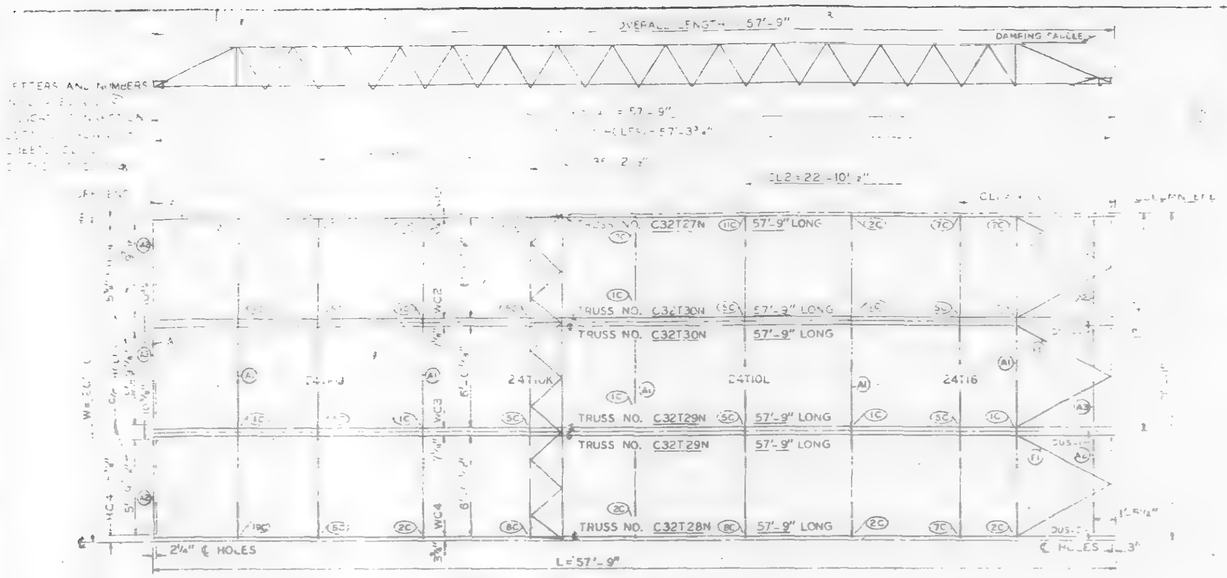
FLOOR PANEL DETAILS
FOR
AIR TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)

PANEL CR2A - 20' x 59'-9"

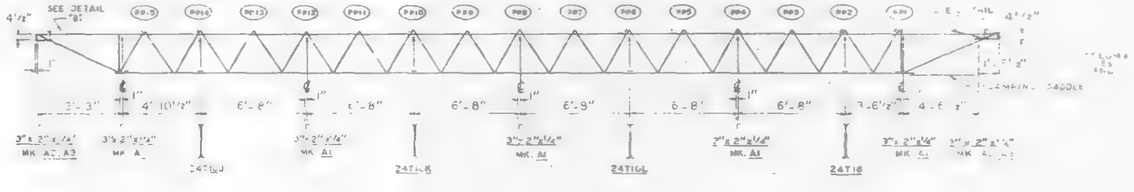
FABRICATION BY LACLEDE STEEL COMPANY

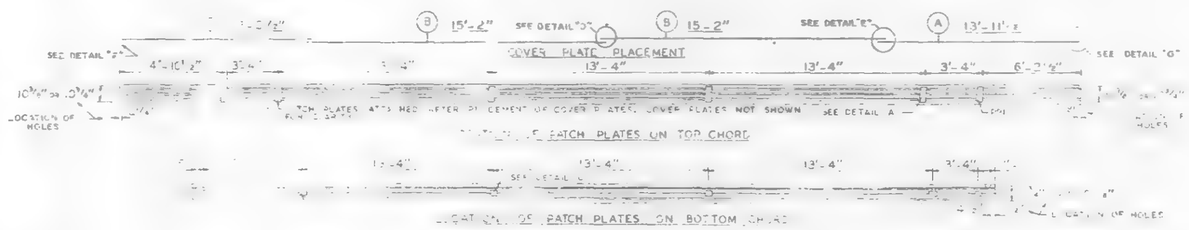
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-29	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PONYA	DATE 2/20/69	DRAWN BY [illegible] DATE DEC. 5, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY TM CHUBA DATE DEC. 5, 1968	IN CHARGE OF PROD. DEN
DETAILED BY A.C. [illegible]		FABRICATION CONT NO W.T.C 22[illegible]	SHEET NO FP CR2A

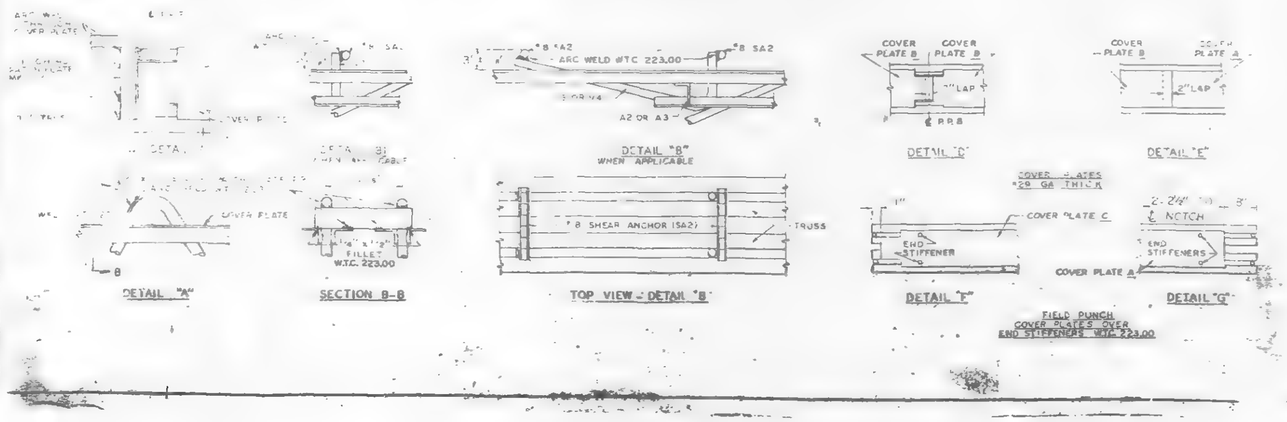


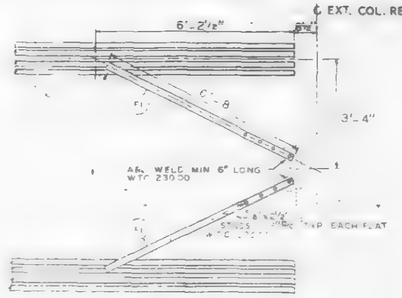
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D3N SIZE 20' x 57'-9"

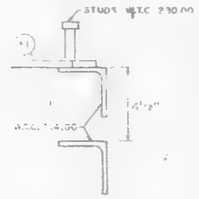








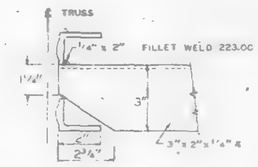
TYPICAL PLAN AT TOP CHORD OF COLUMN DIAGONAL TRUSS BRACES PLACED ON BRACK PT WITC 223.00

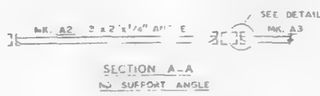


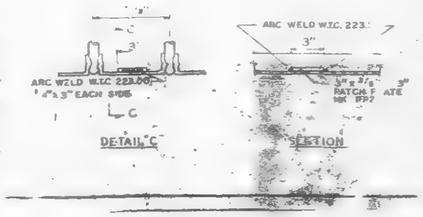
SEAT ANGLE LOCATION FOR DIAGONAL FLATS 4" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T27N	1	C32T27N - 57'-9"	ST 227N
	T28N	1	C32T28N - 57'-9"	ST 228N
	T29N	2	C32T29N - 57'-9"	ST 229N
	T30N	2	C32T30N - 57'-9"	ST 230N
BRIDGING TRUSSES	T10J	1	24T10J - 19'-11"	ST 210J
	T10K	1	24T10K - 19'-11"	ST 210K
	T10L	1	24T10L - 19'-11"	ST 210L
	T16	1	24T16 - 19'-11"	ST 216
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 1/2"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 1/2"	ST 403
DIAGONAL FLATS	F1	6	11 1/2" x 5 1/2" x PL 1/2"	ST 402
PATCH PLATES	FP	18	2'-1" x 1'-4" x PL 1/2"	ST 402
	FP2	16	3" x 1'-8" x PL 1/2"	ST 402
COVER PLATES	A	3	9" x 0'-11 5/8" x 13'-10 1/2"	ST 303
	B	8	9" x 0'-11 5/8" x 15'-2"	ST 303
	C	1	9" x 0'-11 5/8" x 13'-2 1/2"	ST 303
ANGLE CLIPS	E1	24	2" x 2" x 4" x 0'-6"	ST 401
[illegible]	SA2	8	[illegible]	ST 402
ANCHOR SADDLE	D1	2	1/2" x 2 1/2" x 1'-4"	ST 208
	DS2	2	3/8" x 2 1/2" x 1'-4"	ST 208
[illegible]	S3	4	1" Ø x 3"	ST 402
	SB4	5	1" Ø x 0'-10"	ST 402
	[illegible]	4	3/4" x 2" x 6"	ST 402
CONNECTION PLATES	F2	1	4 1/2" x .38" x 0'-6"	ST 402
	P3	1	4 1/2" x .38" x 1'-0"	ST 402
	P4	3	8 1/2" x 1/2" x 1'-6"	ST 402
	P6	1	4 1/2" x .38" x 6'-1"	ST 401

NOTES: (1) ALL SHEAR STUDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUIV.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.







NO.	DATE	REVISION	BY

REF. DRWGS.

7-AB2-5 & 11	7-24-68
7-AB3-47	1-6-69
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-42	10-15-68
5[illegible]-24	9-[illegible]-68
7-AB[illegible]-2	5-15-68
7-AB1-2 & 3	7-24-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. 5 FLOORS 44 (NORTH & SOUTH)

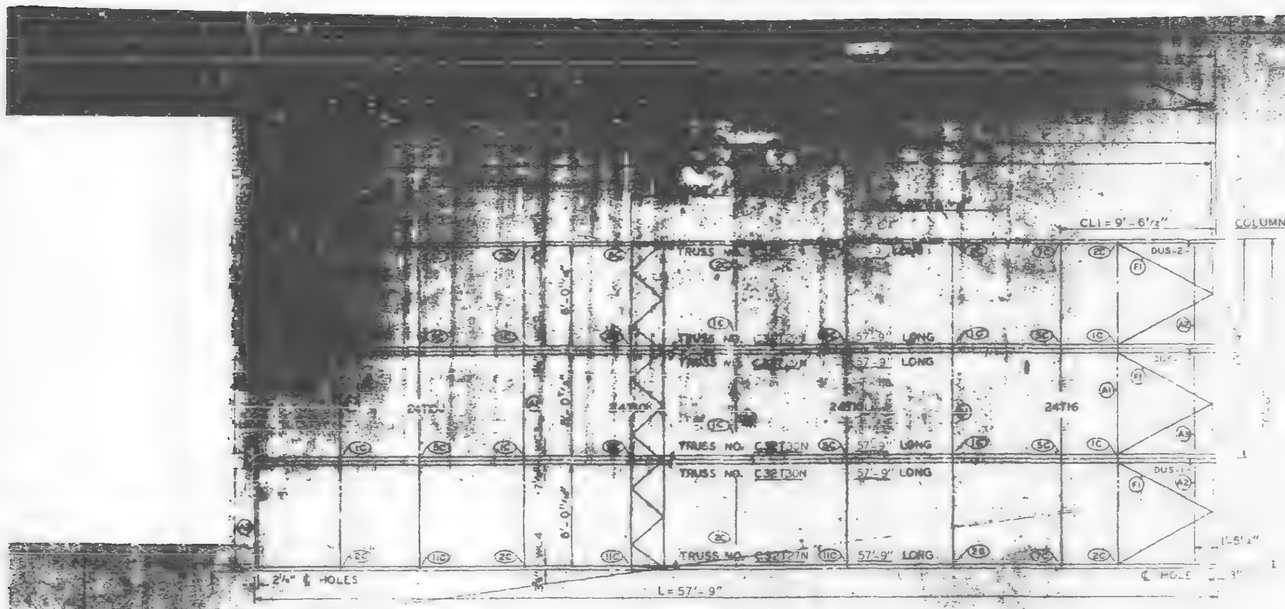
PANEL D3N - 20' x 57'-9"

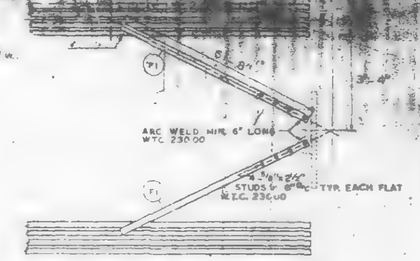
BLDG. 8 FLOORS 44 (EAST & WEST)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB2-47	PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A.	DATE	DRAWN BY: GAC DATE MARCH 26, 1968	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE MARCH 28, 1968	IN CHARGE OF PROD. DEV.
DESIGNED BY: A. CARL WEBER		FABRICATION CONT. NO W.I.C. 221	SHEET NO FP D3N

LACLEDE STEEL CO.



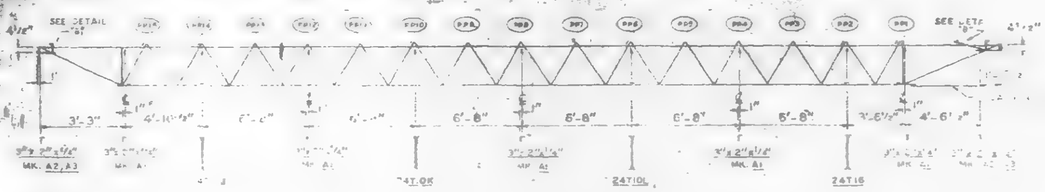


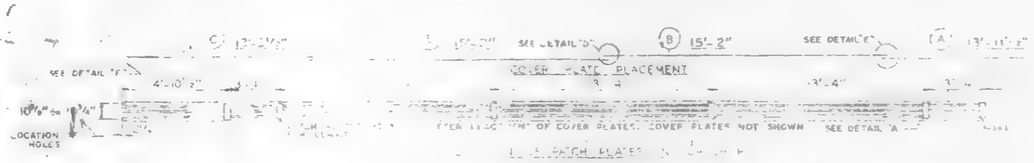
REQUIRED MATERIAL	MK.	PCS.	SIZE	DET.
FLOOR TRUSSES	T2J	2	C32T2J — 57'-9"	ST 227J
	T2N	2	C32T2N — 57'-9"	ST 228N
	T2M	2	C32T2M — 57'-9"	ST 229N
	T3M	2	C32T3M — 57'-9"	ST 230N
BRIDGING TRUSSES	T10J	1	24T10J — 10'-11"	ST 210J
	T10K	1	24T10K — 10'-11"	ST 210K
	T10L	1	24T10L — 10'-11"	ST 210L
	T16	1	24T16 — 10'-11"	ST 216
3"x 2"x 5/16" ANGLE	A1	5	3"x 2"x 1/4" x 10'-11"	ST 403
	A2	4	3"x 2"x 1/4" x 5'-11 1/2"	ST 403
	A3	2	3"x 2"x 1/4" x 6'-11 1/2"	ST 403
DIAGONAL FLATS	F1	9	1 1/2" x 3'-6" x 8'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	6" x .0135" x 13'-11 1/2"	ST 303
	B	3	6" x .0135" x 11'-2"	ST 303
	C	3	6" x .0135" x 13'-2 1/2"	ST 303
ANGLE CLIPS	CL	24	3"x 3"x 1/4" x 0'-8"	ST 400
"B" SHEAR ANCHOR	SHZ	6	1" ø STUDS x 0'-2"	ST 400
DAMPING SADDLE	DUS-2	2	3/16" x 3 1/2" x 3'-6 1/4"	ST 298
	DUS-1	1	3/16" x 3 1/2" x 5'-6 1/4"	ST 298
CONNECTION BAR	CB1	4	1" ø x 1'-3"	ST 300
	CB2	6	1" ø x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3/16" x 3 1/2" x 8 1/2"	ST 400
	P2	1	4 5/8" x .39" x 0'-9"	ST 400
	P3	1	6 1/2" x .39" x 1'-0"	ST 400
	P4	3	6 1/2" x 1 1/2" x 0'-8"	ST 401
	P5	1	4 1/2" x .39" x 0'-2"	ST 401

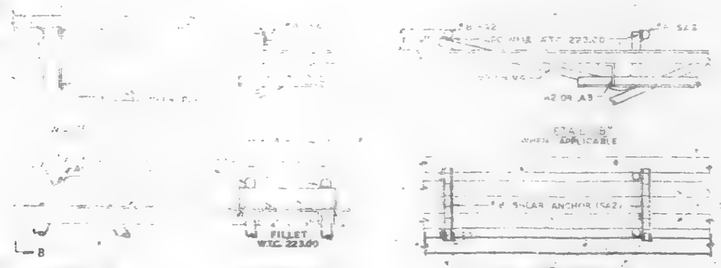
WELDS TO BE MADE WITH LOW HYDROGEN ELECTRODES IN THE E-70 SERIES OR EQUAL AS REQUIRED UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET

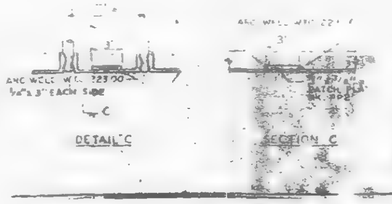
1. DIMENSIONS MK4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DR3N SIZE 20' x 57'-9"









NO	DATE	REVISION	BY

SIGNING ENGINEERS	CHRISTIANSEN - ROBERTSON
Structural & Civil Engineers	
APPROVED	
X APPROVED AS NOTED	
REVISED	
Job No. 423(69) SC	

REF. DRAWINGS

S1	7-22-68
S-48	1-6-69
S-64	10-15-68
S-44, 5 & 16	7-22-68
S-64, 65	10-15-68
S-24	10-11-68
S-5	10-17-68
S-1, 2, 3 & 4	7-22-68

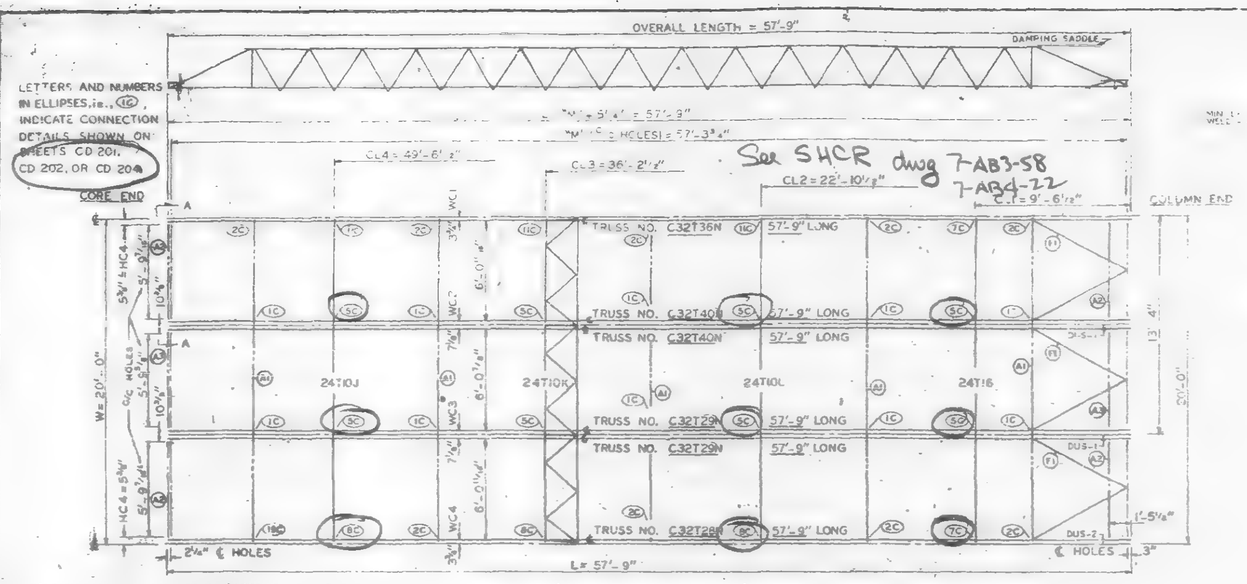
44 (NORTH & SOUTH)

PANEL DR3N SIZE 57'-9"

BDG. & FLOORS - 44 (EAST & WEST)

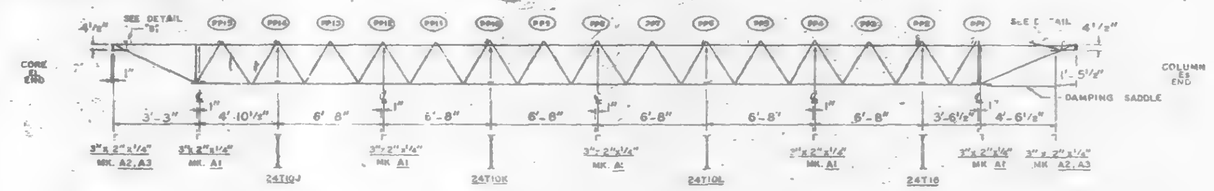
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-883-48 1-6-69	PLATE
APPROVED FOR FABRICATION BY FOR R.D.N.Y.A.	DATE	DRAWN BY DATE MARCH 26, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY TM CHUNA DATE MARCH 26, 1969	IN CHARGE OF SHOP DET.
DETAILED BY CAR WEBER		FABRICATION CONT. NO W.C. 221	SHEET NO. FP DR3N

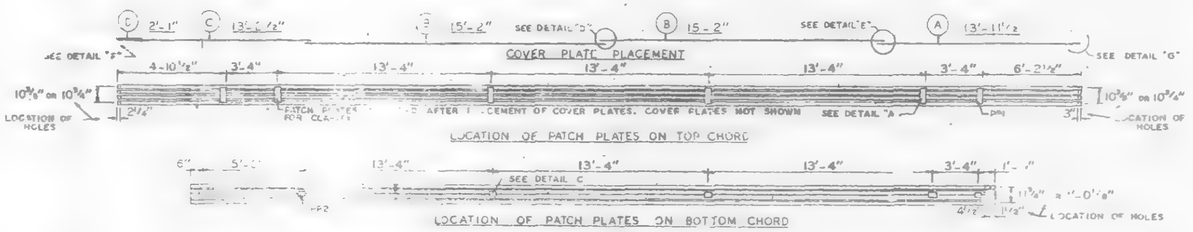
UNITED STEEL COMPANY

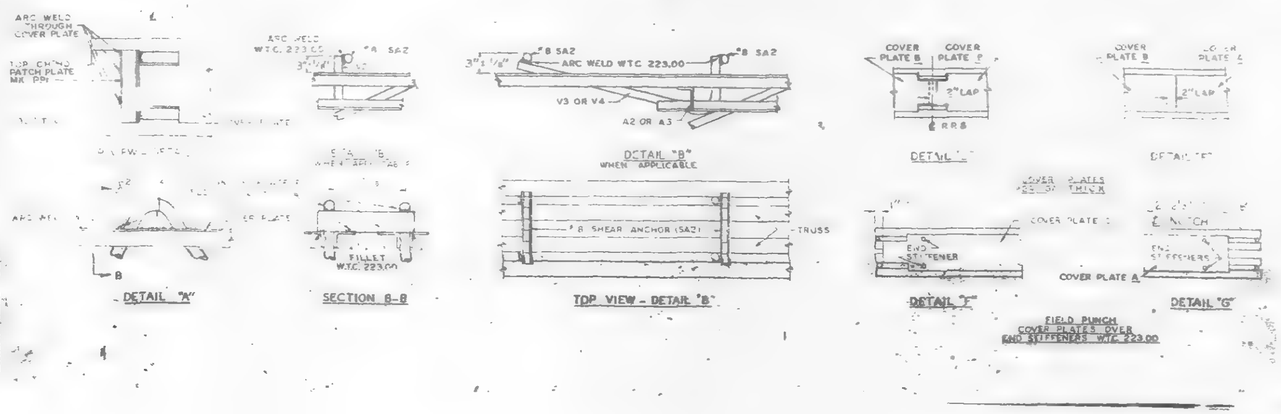


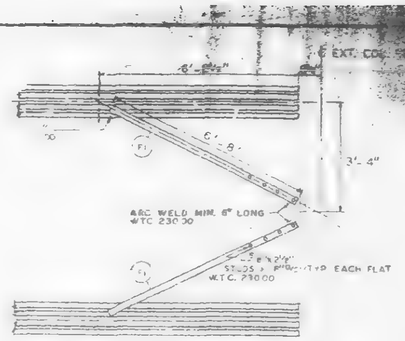
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D8N SIZE 20' x 57'-9"

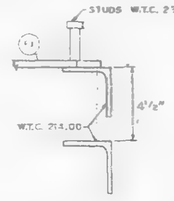








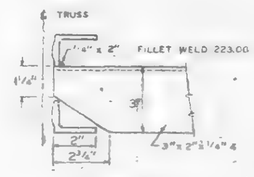
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

				REF. DWG.
FLOOR TRUSSES	T10J	1	C32T36N - 57'-9"	ST 200
	T10K	1	C32T40N - 57'-9"	ST 200A
	T10L	2	C32T29N - 57'-9"	ST 200B
BRIDGING TRUSSES	T10J	1	24T10J - 19'-11"	ST 210J
	T10K	1	24T10K - 19'-11"	ST 210K
	T10L	1	24T10L - 19'-11"	ST 210L
	T16	1	24T16 - 19'-11"	ST 216
3"x 2"x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 10'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 3'-11"	ST 403
	A3	2	3" x 2" x 1/4" x 8'-11"	ST 403
DIAGONAL FLATS	F1	8	1 1/2" x 5/8" x 8'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-8"	ST 400
	PP2	18	3" x 5/8" x 0'-3"	ST 400
COVER PLATES	A	3	0" x .0135" x 13'-11 1/4"	ST 303
	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	0" x .0135" x 13'-2 1/2"	ST 303
	D	3	6" x .0135" x 2'-11"	ST 336
ANGLE CLIPS	C1	24	2 1/2" x 4" x 1/4" x 0'-8"	ST 400
"B" SHEAR ANCHOR	SA2	9	"B" REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3/8" x 3 1/2" x 2'-4" x 3'-3 1/2"	ST 208
	DUS-2	1	3/8" x 3 1/2" x 2'-4" x 3'-2"	ST 208
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
	CB4	6	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3 1/8" x 8 1/2"	ST 400
	P2	1	4 1/2" x .38" x 0'-8"	ST 400
	P3	1	4 1/8" x .38" x 1'-0"	ST 400
	P4	3	6 1/2" x 1 1/2" x 0'-8"	ST 406
	P8	1	4 1/2" x .38" x 0'-9"	ST 401

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



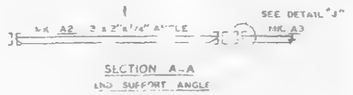
DETAIL "J"
END SUPPORT ANGLE ATTACH TO T

NO	DATE	REVISION	BY

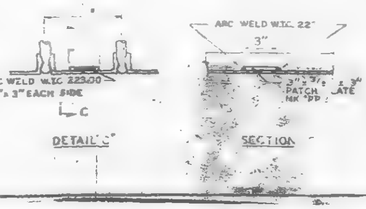
SKILLING, HELLE, CHRISTIANSEN, ROBERTSON
Structural & Civil Engineers
923169

REF. DRWGS.

7-A82-5 & 11	7-24-68
7-A83-58	1-6-69
7-AB4-3	10-15-68
7-AB4-5 & 16	7-24-68
7-AB4-42	9-4-68
SK-424	8-14-68
7-A81-5	9-4-68
7-A81-2 & 3	7-24-68



SECTION A-A
END SUPPORT ANGLE



DETAIL "C"

SECTION

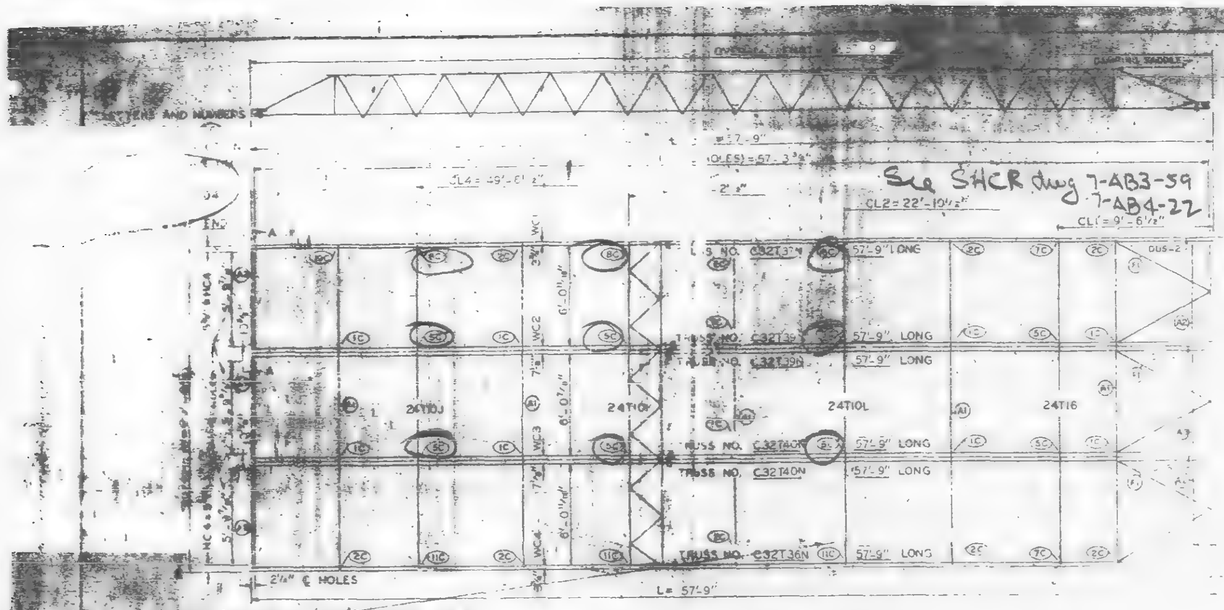
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 44 (SOUTH ONLY)

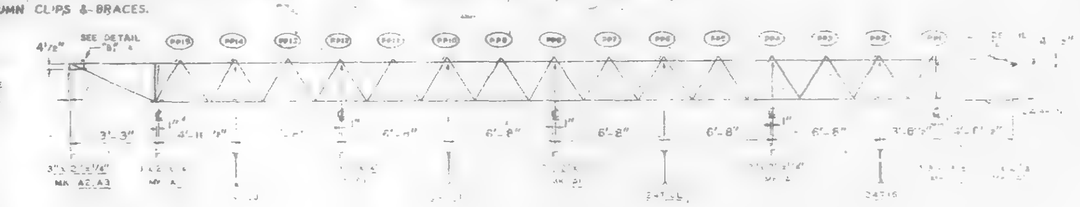
PANEL D8N - 20' x 57'-9"

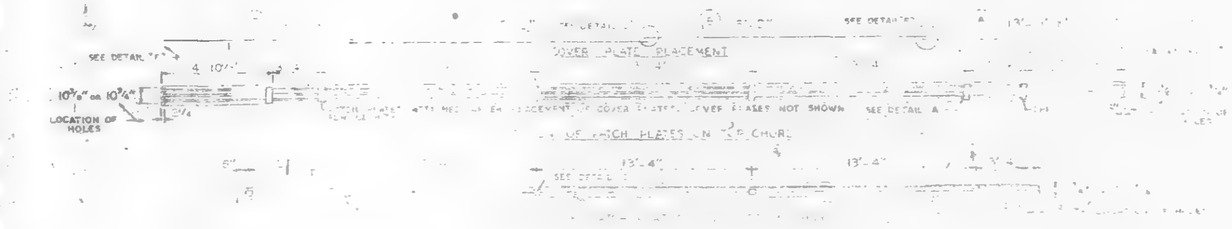
FABRICATION BY ALLEGE STEEL COMPANY

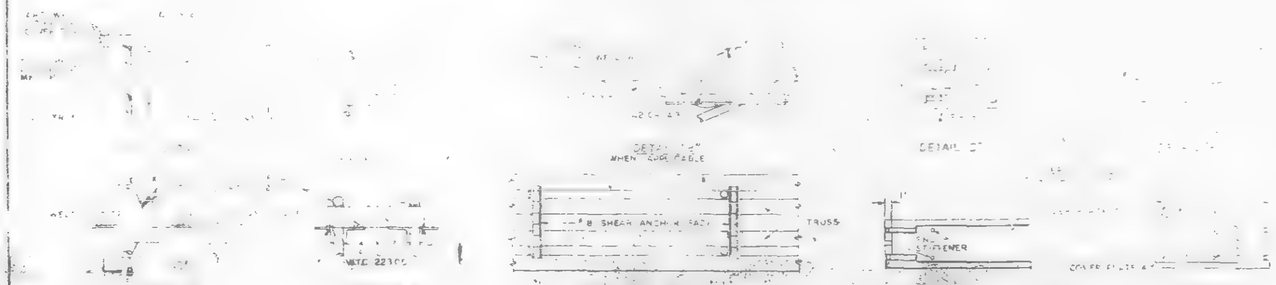
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWN 7-A82-58	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.	DATE	DRAWN BY gdc DATE MARCH 26, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY: T.M.CHUNG DATE MARCH 26, 1969	IN CHARGE OF PROD. DEPT.
DETAILED BY: A. CARL WEBER		FABRICATION CONT. NO W.T.C. 221	SHEET NO. FP D8N

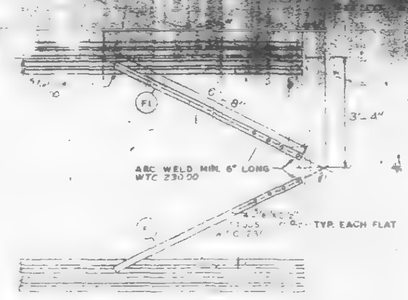


PANEL NO. DR8N SIZE 20' x 57'-9"









REQUIRED					
NOTE MARK					
FLOOR TRUSSES	T2G				
	T3G				
	T36G				
	T40G				
BRIDGING TRUSSES	T10J				
	T10K				
	T10L				
	T16				
3"x 2"x¼" ANGLE	A1				
	A2				
	A3				
DIAGONAL FLATS	F1				
PATCH PLATES	PP1				
	PP2				
COVER PLATES	A				
	B				
	C				
	C1				
	SA2				
ANGLE	DA2				
	DA2-2				
	CB3				
	CB4				
	F				
	F2				

NO.	DATE	REVISION	BY

SKILLING · HELLE · CHRISTIANSEN · ROBERTSON
Structural & Civil Engineers

4/23/69 SK

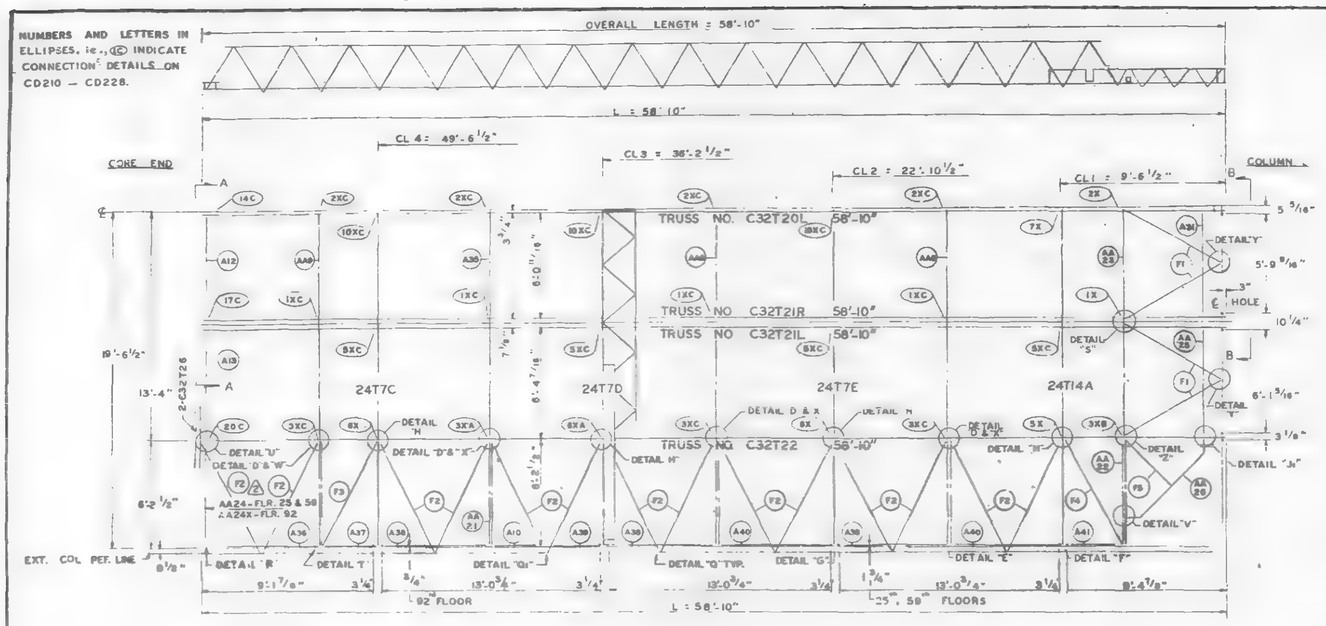
44 (SOUTH ONLY)

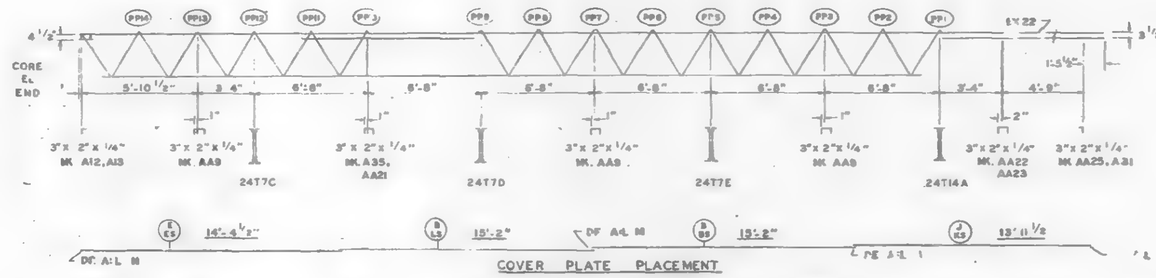
PANEL DR8N ℄ x 57'-9"

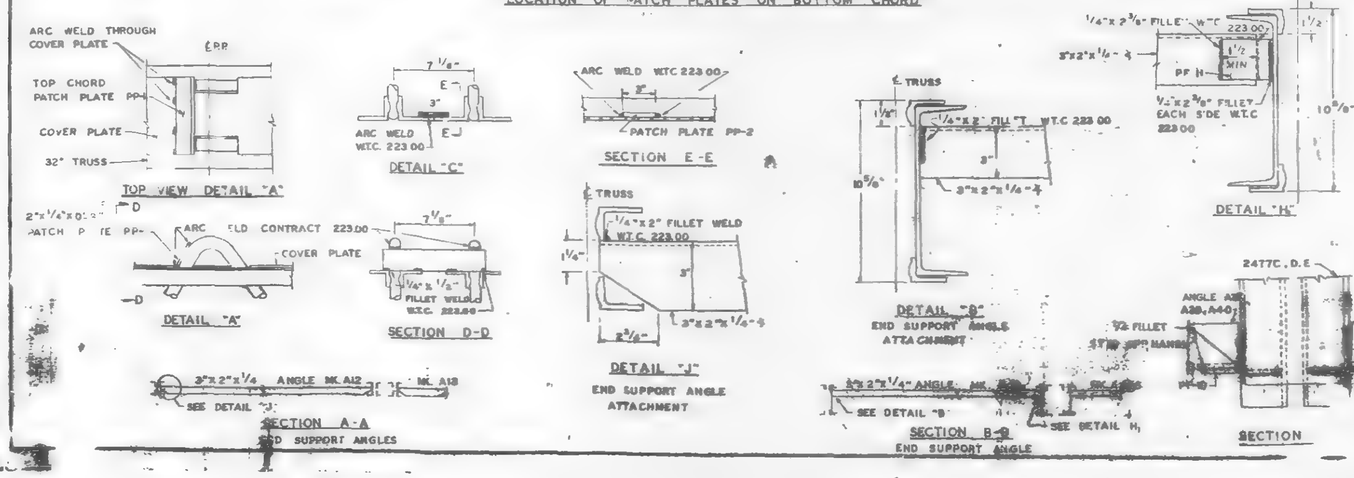
LA CLEDE STEEL CO.

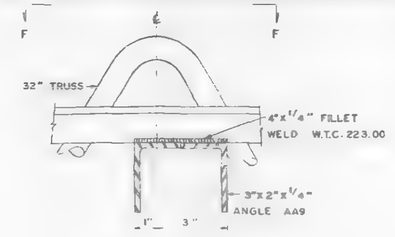
AT MACDONNOIS		DESIGN DRAWING NO. 7-AB3-59	PLATE NO.
APPROVED FOR FABRICATION BY FOR DWY A	DATE	DRAWN BY gdc DATE MARCH 27, 1969	
APPROVED FOR FABRICATION BY KDW FABRICATOR	DATE	CHECKED BY T.H.CHURA DATE MARCH 27, 1969	IN CHARGE OF FIELD ERECTION
DETAILED BY		FABRICATION CONT. NO. W.O. 221	SHEET NO. F-FP-DR8N

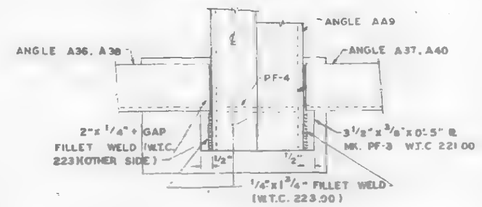
NUMBERS AND LETTERS IN ELLIPSES, ie., (2C) INDICATE CONNECTIONS DETAILS ON CD210 — CD228.

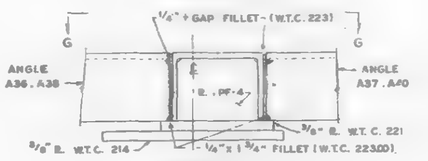


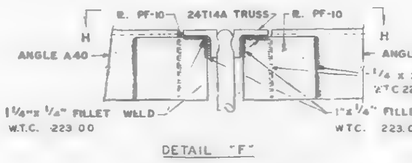


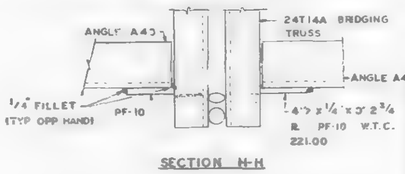


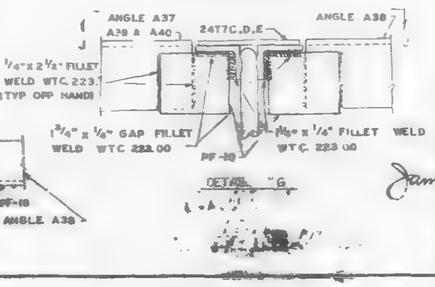












REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS	SIZE	DRWG
FLOOR TRUSSES	T20L	1	C32T20L- 58'-10"	ST 220L
	T21L	1	C32T21L - 58'-10"	ST221L
	T21R	1	C32T21R- 58'-10"	
	T22	1	C32T22 - 58'-10"	ST 222
BRIDGING TRUSSES	T7C	1	24T7C - 19'-6"	BT207C
	T7D	.	24T7D - 19'-6"	BT207D
	T7E	1	24T7E - 19'-6"	BT207E
	T14A	1	24T14A - 19'-6"	BT214A
3"x 2"x 1/4" ANGLES	A10	1	3"x 2"x 1/4"x 2'-7 15/16"	ST404
	A12	.	3"x 2"x 1/4"x 5'-11 11/16"	ST404
	A13	.	3"x 2"x 1/4"x 6'-3 7/16"	ST404
	A31	1	3"x 2"x 1/4"x 5'-8 1/16"	ST410
	A36	1	3"x 2"x 1/4"x 5'-11 1/2"	ST410
	A37	1	3"x 2"x 1/4"x 2'-10"	ST410
	A38	3	3"x 2"x 1/4"x 6'-4"	ST410
	A39	1	3"x 2"x 1/4"x 2'-9"	ST410
	A40	2	3"x 2"x 1/4"x 6'-2"	ST410
	A41	1	3"x 2"x 1/4"x 2'-10 3/4"	ST410
	A35	1	3"x 2"x 1/4"x 13'-3"	ST410
ANGLE ASSEMBLY *AA24 IS REPLACED BY AA24X ON FLR. 92. (2)	AA21	1	SEE REF. DRWG.	ST411
	AA22	1	SEE REF. DRWG	ST411
	AA23	1	SEE REF. DRWG.	ST411
	AA24	1	SEE REF. DRWG.	ST412
	AA25	1	SEE REF. DRWG.	ST412
	AA26	1	SEE REF DRWG.	ST412
	AA9	3	SEE REF. DRWG.	ST404
PATCH PLATES	PP1	6	2"x 1'-9" x 0'-9"	ST400
	PP2	6	3"x 3/8"x 0'-3"	ST400
COVER PLATES	A	1	9"x 0.135"x 13'-11 1/2"	ST 303
	As	2	3 1/2"x 0.135"x 13'-11 1/2"	ST 304
	B	2	9"x 0.135" x 15'-2	ST 303
	Bs	1	3 1/2" x 0.135" x 15'-2"	ST 303
	Ls	1	3 1/2" x 0.135" x 15'-2"	ST 304
	E	1	9" x 0.135"x 14'-4 1/2"	ST 303
	Es	1	3 1/2"x 0.135" x 14'-4 1/2"	ST 303
ANGLE CLIPS** (2)	C1	12	2"x 1'-2"x 2.25"x 6"	ST400
	C2	4	2"x 2'-11/2"x 2.25"x 6"	ST400
DIAGONAL FLATS	F1	4	1 1/2"x 3/8"x 6'-8"	ST402
	F2 F2A	7	1 1/2"x 3/8"x 6'-10 1/2"	ST402
	F3	1	1 1/2"x 3/8"x 6'-11 1/4"	ST402
	F4	1	1 1/2" x 3/8"x 7'-0"	ST 402
	F5	1	1 1/2"x 3/8"x 4'-4"	ST 402
MISC. PLATES	PF-1	2	1 1/2"x 1/2"x 0'-4"	ST400
	PF 3	5	3 1/2"x 3/8" x 0'-5"	ST400
	PF 7	1	5"x 3/8" x 0'-4"	ST401
	PF 8	5	3'-2"x 1/4"x 0'-2 3/8"	ST401
	PF-10	8	4 1/2"x 1/4"x 0'-2 3/4"	ST401
	PF 11	1	3"x 1/4"x 0'-2 3/8"	ST412
EXTENDED END	EX	1	SEE REF DRWG	ST 222
	22			

(2) ** NUMBER OF PIECES OF MK. C1 & C2 WILL BE CORRECT AFTER FLOOR 32, TOWER A. PIECES FOR FLOORS 10-32 IS C1, NONE - C2, SIXTEEN (16).

NO.	DATE	REVISION	BY
(2)	7-1-69	AS NOTED	G.D.C
(1)	2-5-69	GENERAL	G.D.C

SEE SHEET FP F2-2 FOR NOTES, REF DRWS & ADDITIONAL DETAILS

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER — N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 25, 59 & 92 (NORTH & SOUTH)
PANEL F2 19'-6" x 58'-10"
BLDG. B FLOORS 25, 59 & 92 (EAST & WEST) (2)

FABRICATION BY: LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83-34
PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.&N.J. DATE 7/1/69
DRAWN BY: DATE DEC. 3, 1968
APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE
CHECKED BY: T.M.CHURA DATE DEC. 4, 1968
IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO.
DETAILED BY: A. CARL WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP - F2

CLEAR LENGTH 58'-6"

"M" = 58'-6"

"M" = (HOLES) = 58'-0"

CL = 2'-9"

I.D. 22'-10½"

K 8 6

TRUSS NO. C32EK 8'-6"

TRUSS NO. C32FK 58'-6" LONG

TRUSS NO. C32TK 8'-6"

8'-6"

℄ & DIMENSIONS ARE RELATED TO HOLES IN BEARING END OF FLOOR TRUSSES WHICH ARE SHOWN WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ IN THE COLUMN CLIPS & BRACES.

ANGLE BRK SIZE 20" x 8 6

SEE DETAIL

4'-0"

6'-0"

3" x 2" x 1/4" MK. A2, A3

3½" x 2½" x 1/4" MK. A1

3½" x 2½" x 1/4" MK. A1

3½" x 2½" x 1/4" MK. A1

PATIO

3'-11½" 5'-0"

13'-4"

PLACEMENT

LOCATION OF HOLE

PLATES COVER PLATES NOT SHOWN

FOR CLARITY

OF BATCH PLATES

TRUSS

1'-3" LAP

INNER

7-22-68

10

& 40 10 15

, 15 & 30 7 22

3.1 1 3

11

7 22

7 22

7-ABI-5 10-15-68

45-46(N)

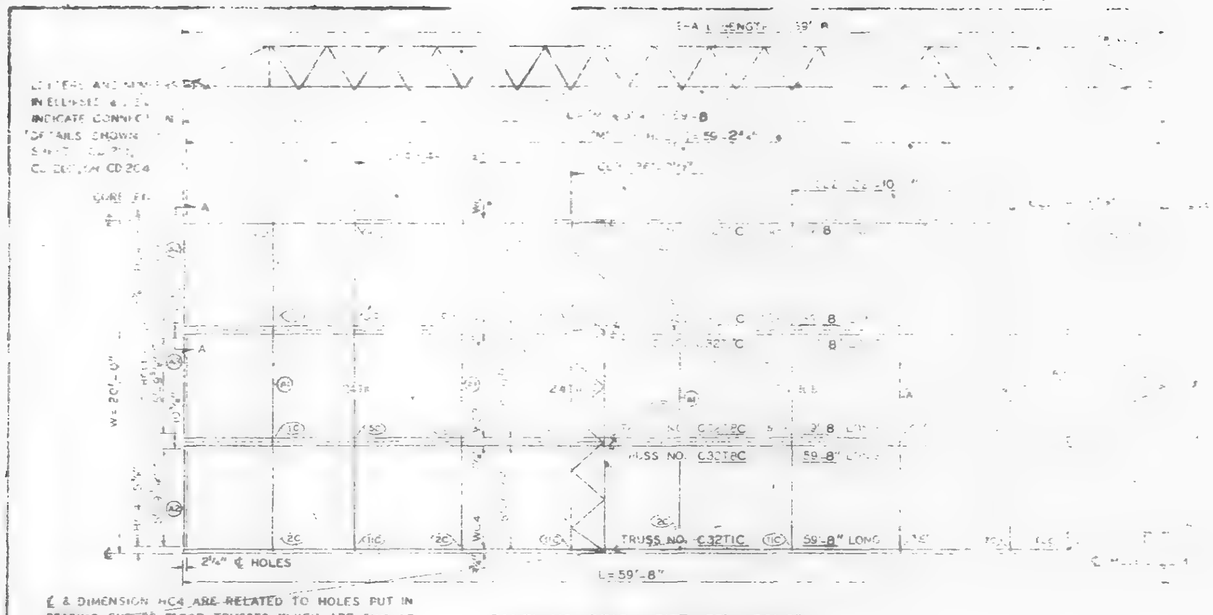
IK 8 6

10

11/7/68

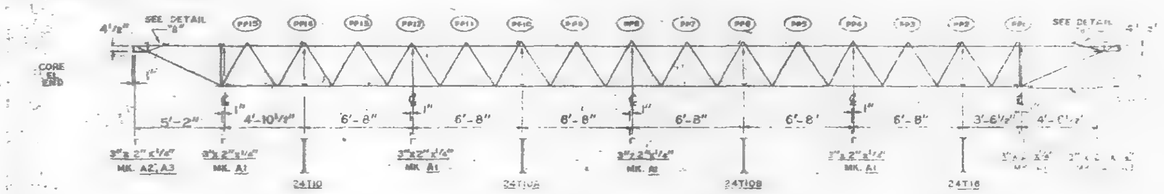
OCT. 31, 1968

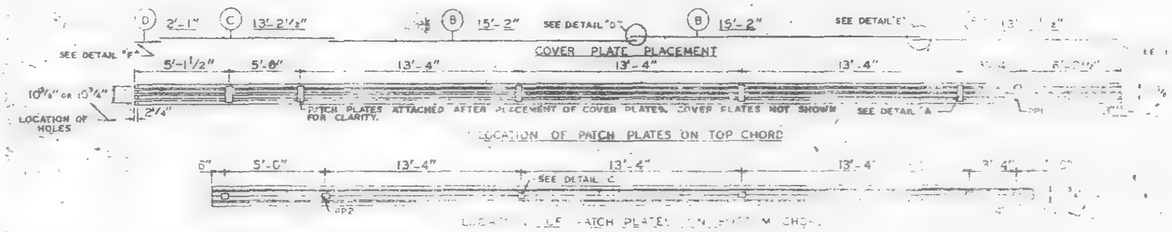
K



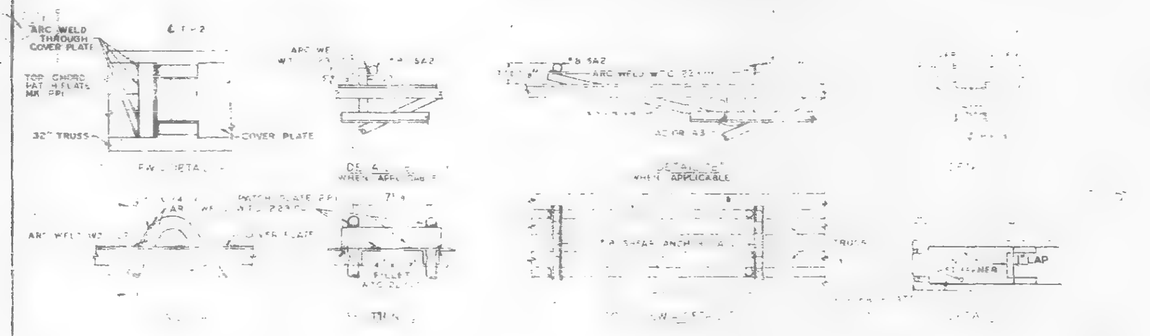
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D1C1C SIZE 20' x 59'-8"





LOCATION OF PATCH PLATES ON TOP CHORD



	7-22-68
	10-
& 42	10-15-
16 & 30	7-22-6
3,1	1 &
	11
	7-22-68
	7-22-68
7-ABI-5	10-15-68

50-58, 60-66, 68-74, 80-91, 93-106 (S)

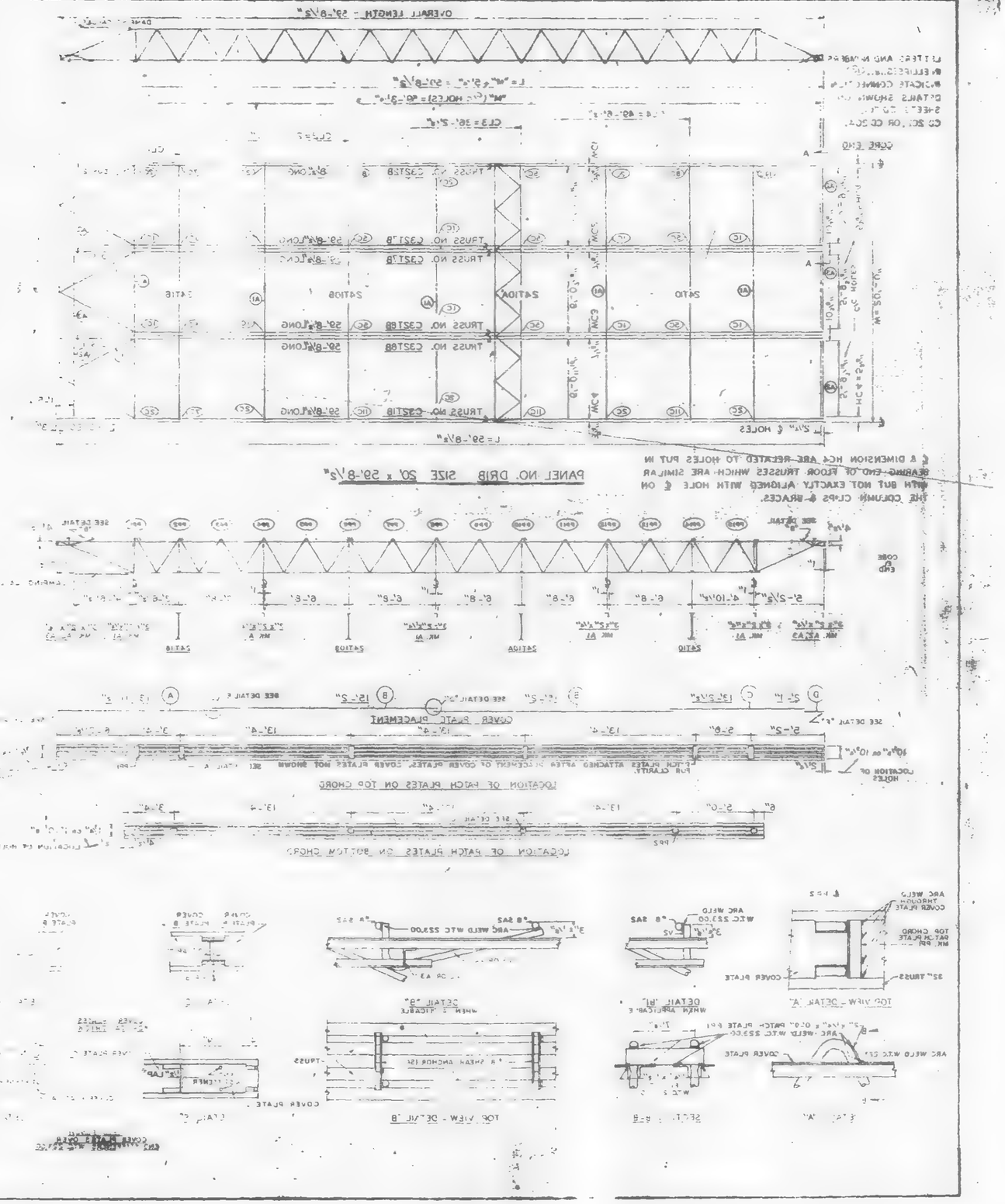
IC 8

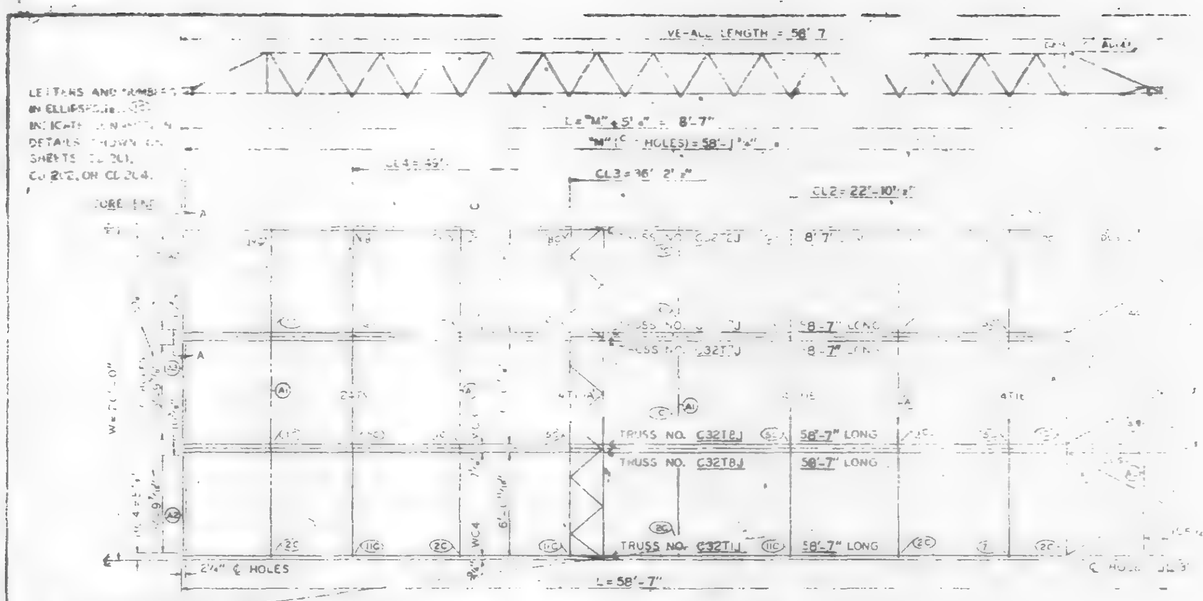
10

11/7/68

OCT. 31, 1968

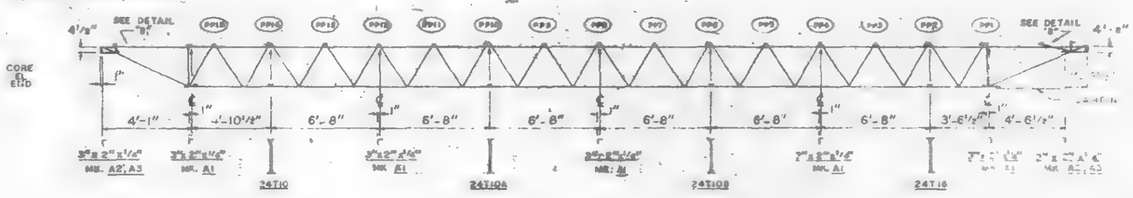
D1C

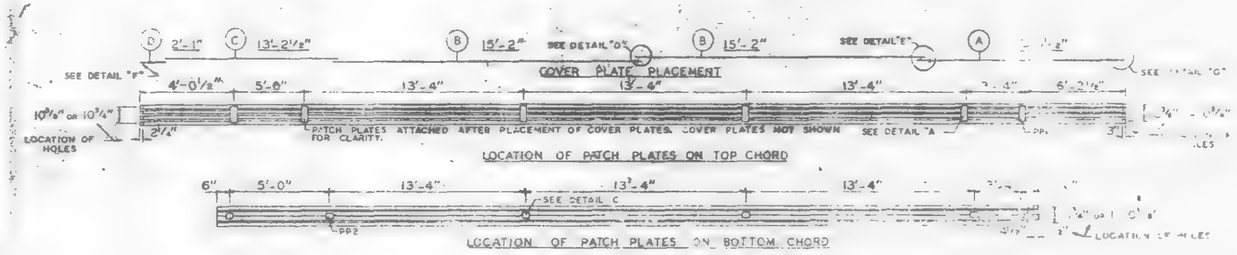


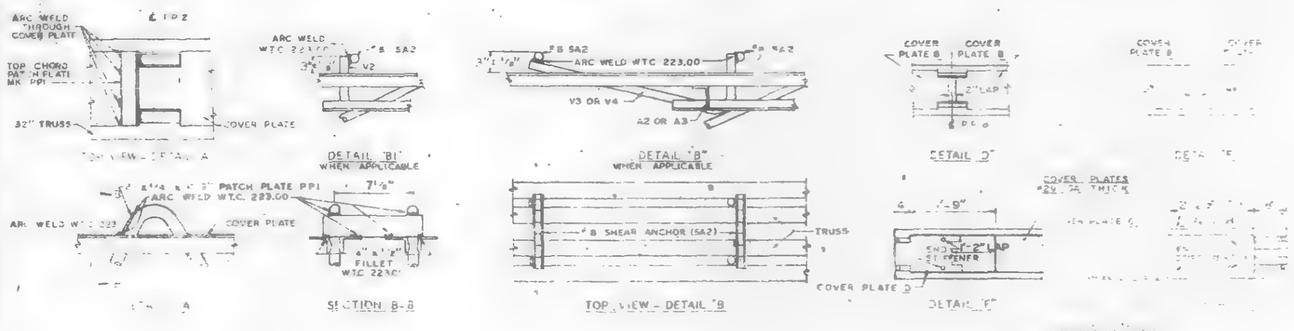


℄ & DIMENSION WC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D81J SIZE 20' x 58'-7"



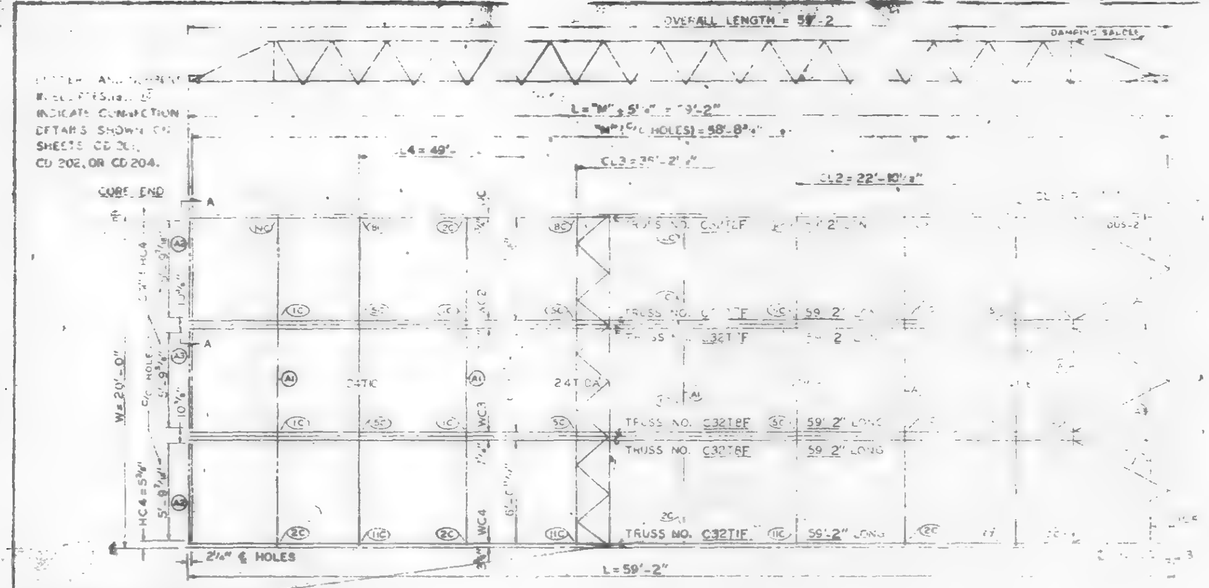




40 (N)

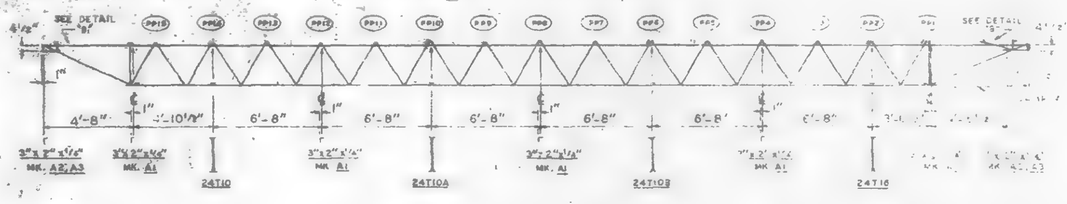
11/7/68

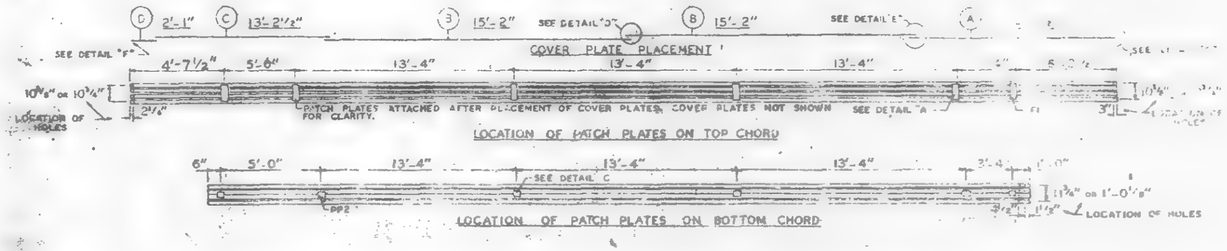
OCT 31, 1968

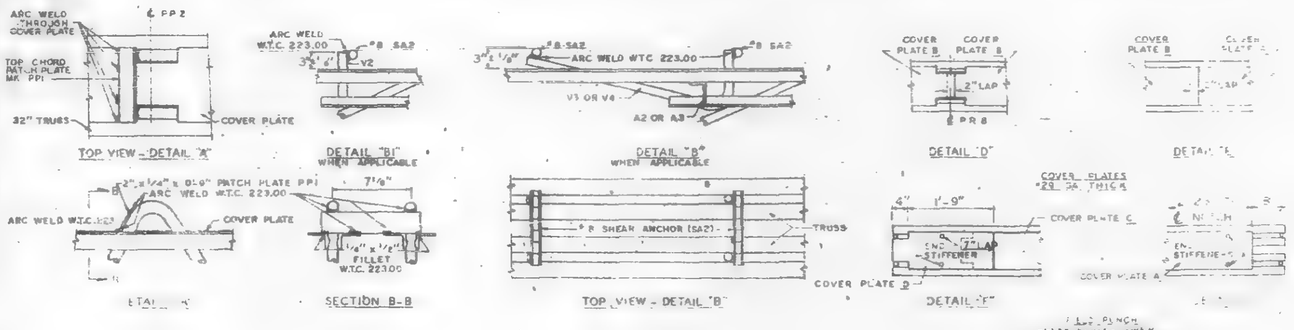


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DF1E SIZE 20' x 59'-2"



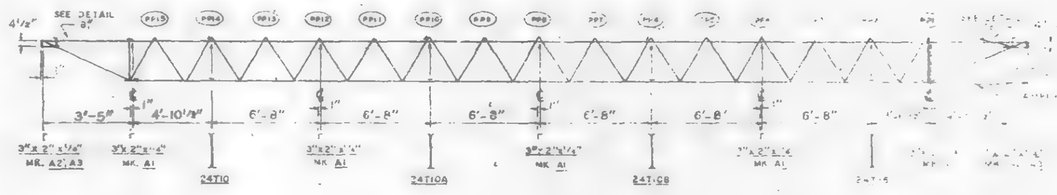


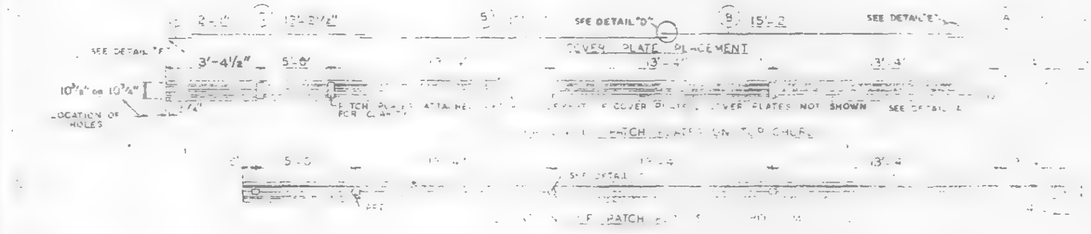


47-48, 70-71(N)
11/7/68
OCT 31, 1968
DF1E

& DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE & IN THE COLUMN CLIPS & BRACES.

PANEL RIM SIZE

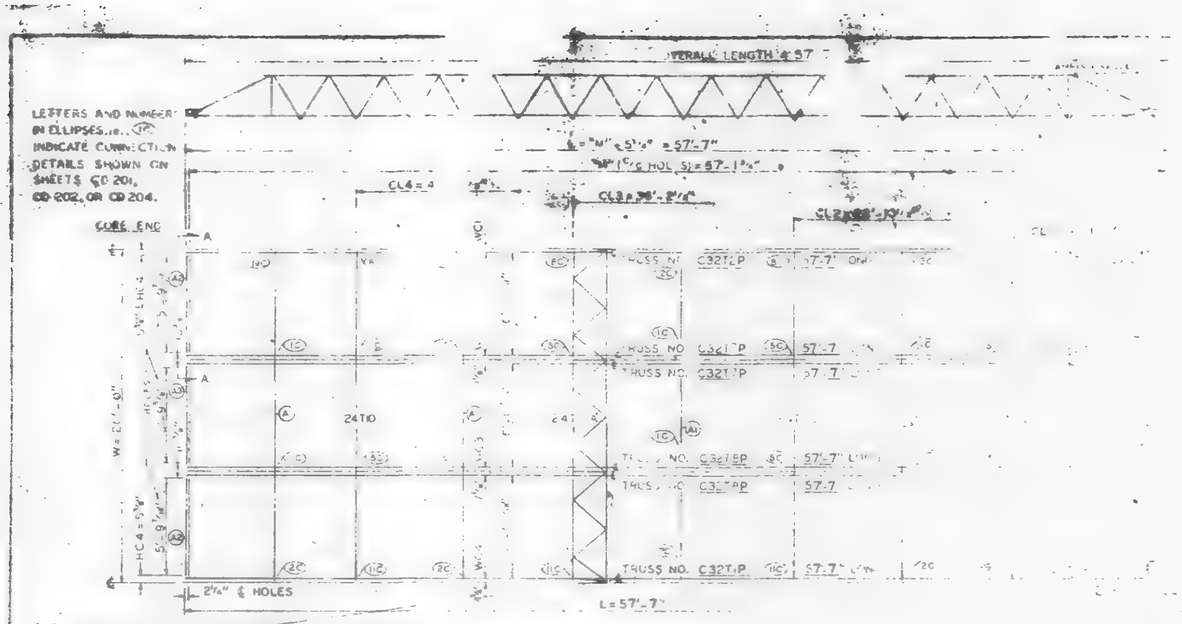




72-73 (N)

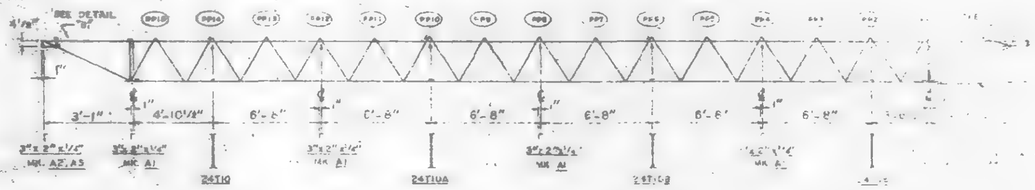
11/7/68

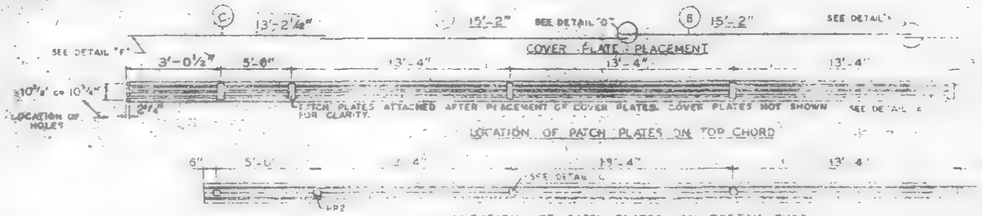
OCT 31, 1968

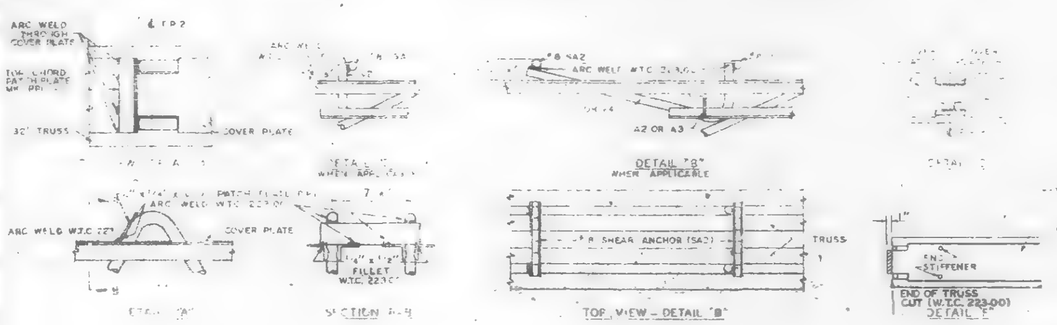


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DRIP SIZE 20' x 57'-7"





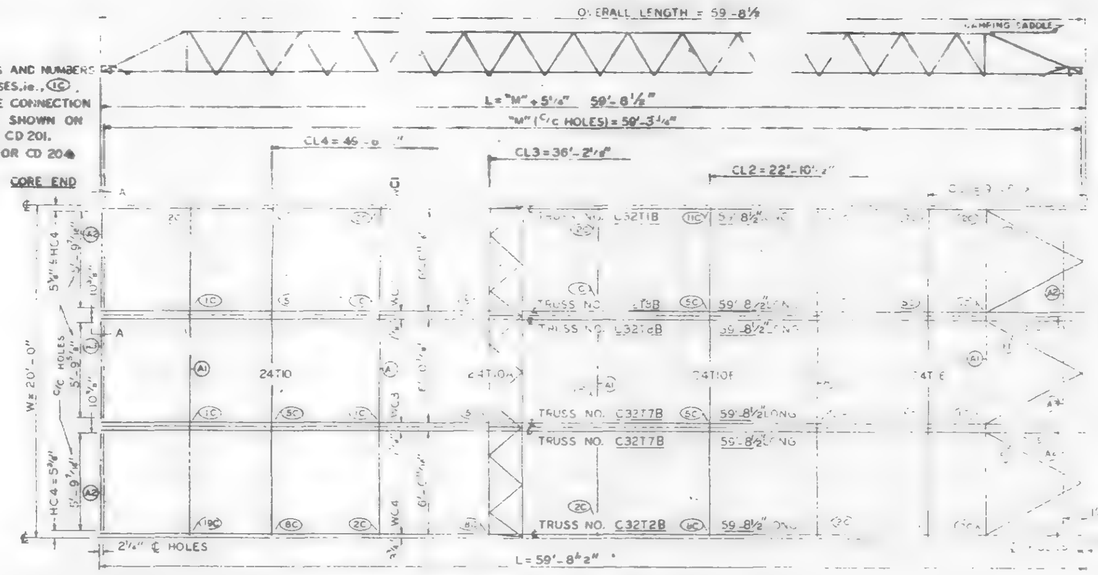


74 (N)

James W. Lute 11/5/68

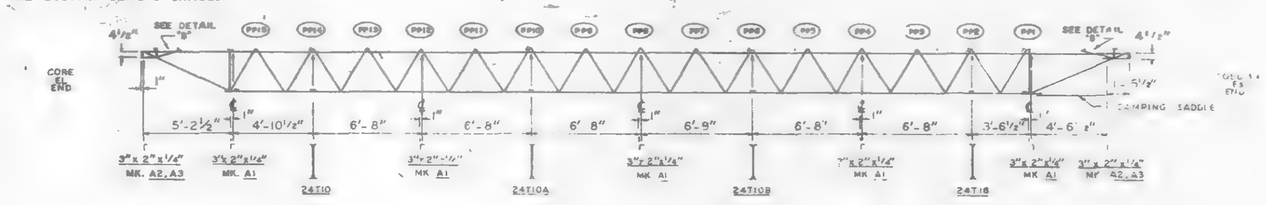
LAKESIDE STEEL CO.

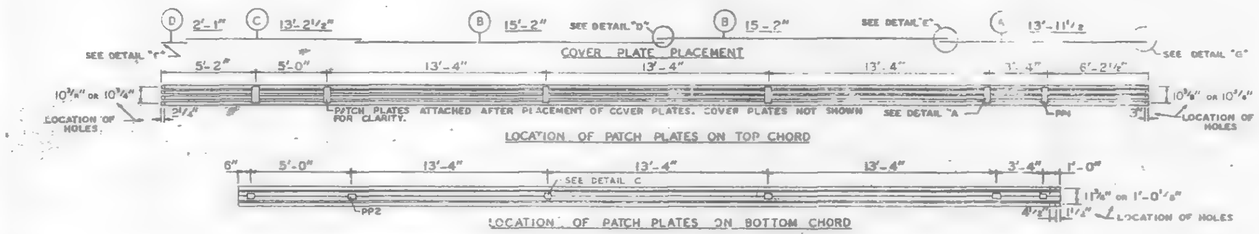
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

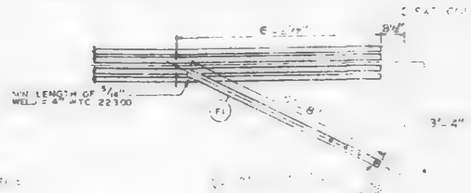


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D1B SIZE 20' x 59'-8½"





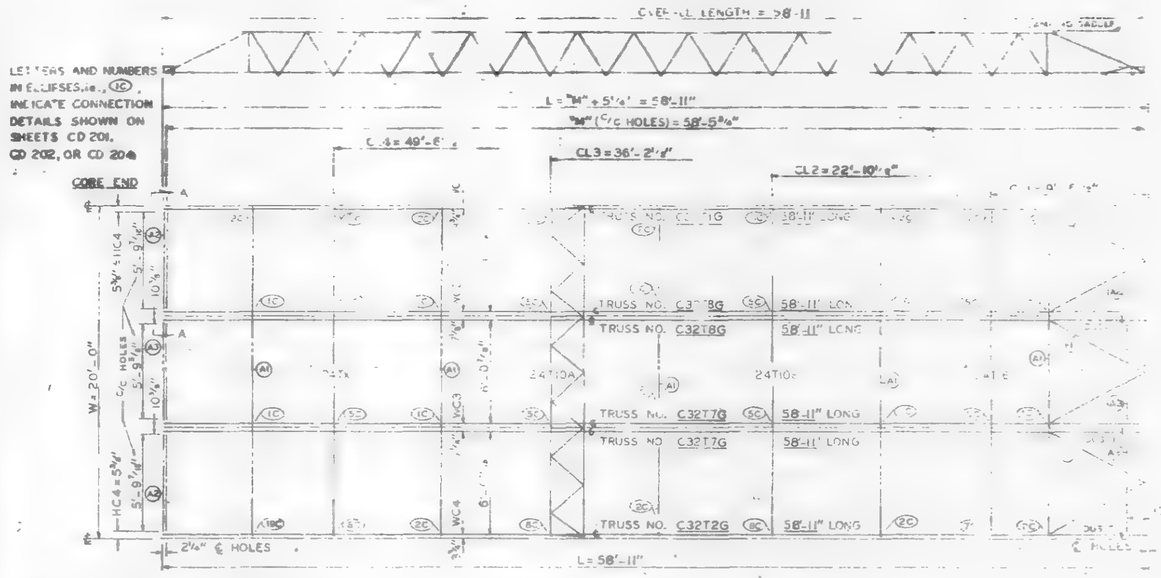


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4⅞" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL

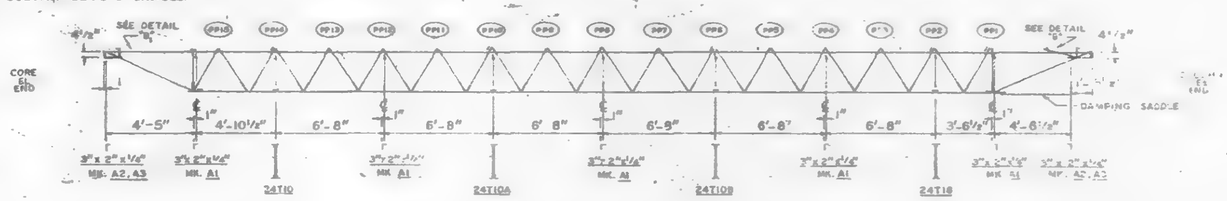
MATERIAL	MK	PCS	SIZE	SPEC. NO.
FLOOR TRUSSES	T1B	1	C32T1B - 59'-8½"	ST 2018
	T2B	1	C32T2B - 59'-8½"	ST 2028
	T7B	2	C32T7B - 59'-8½"	ST 2078
	T8B	2	C32T8B - 59'-8½"	ST 2088
	T10	1	24T10 - 11'-11"	ST 210
	T10A	1	24T10A - 11'-11"	ST 210A
BRIDGING TRUSSES	T1CB	1	24T1CB - 11'-11"	ST 210B
PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	6	4" x 1/4" x 0'-9"	ST 400
	A	3	3½" x 2" x 1/4" x 0'-9"	ST 400
	B	4	3½" x 2" x 1/4" x 0'-8"	ST 400
	C	3	3½" x 2" x 1/4" x 0'-9"	ST 400
	D	4	3½" x 2" x 1/4" x 0'-9"	ST 400
	E	4	3½" x 2" x 1/4" x 0'-9"	ST 400
	F1	3	6" x 1/4" x 0'-8"	ST 400
	F2	3	4½" x .359" x 0'-9"	ST 401
ANGLES	A1	2	3" x 2" x 1/4" x 0'-9"	ST 400
	A2	2	3" x 2" x 1/4" x 0'-9"	ST 400
	A3	2	3" x 2" x 1/4" x 0'-8"	ST 400
	A4	2	3½" x 2" x 1/4" x 0'-9"	ST 400
	A5	2	3½" x 2" x 1/4" x 0'-9"	ST 400
	A6	2	3½" x 2" x 1/4" x 0'-9"	ST 400

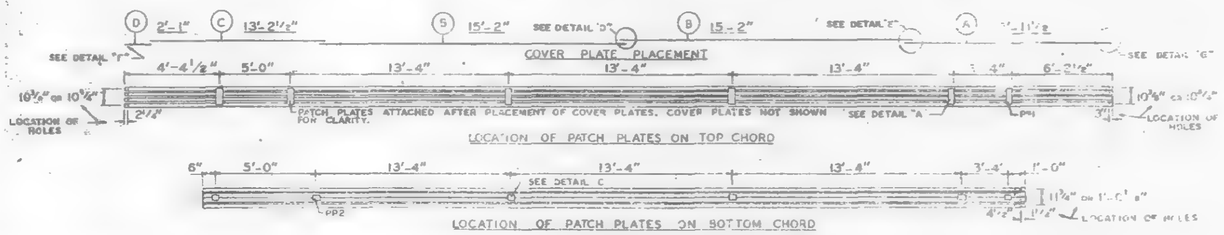
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

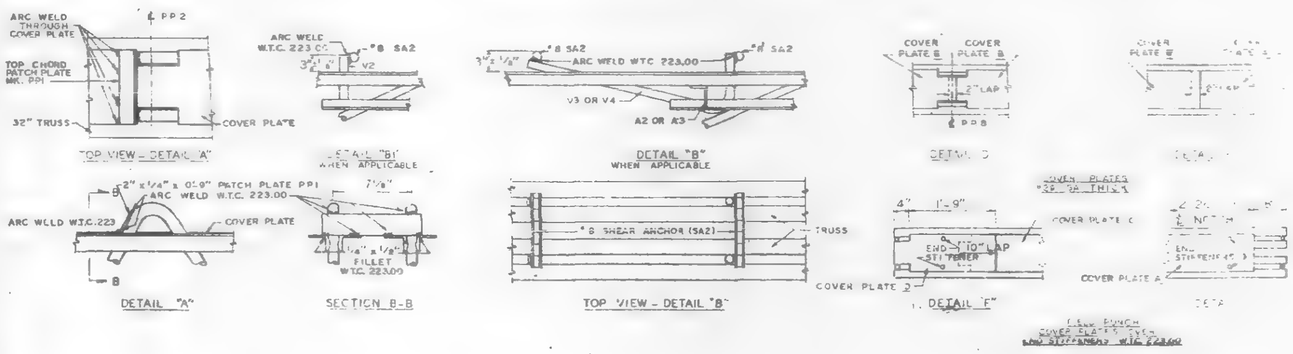


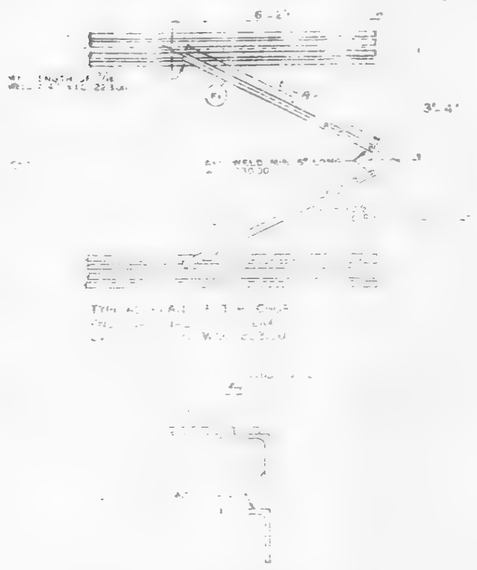
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

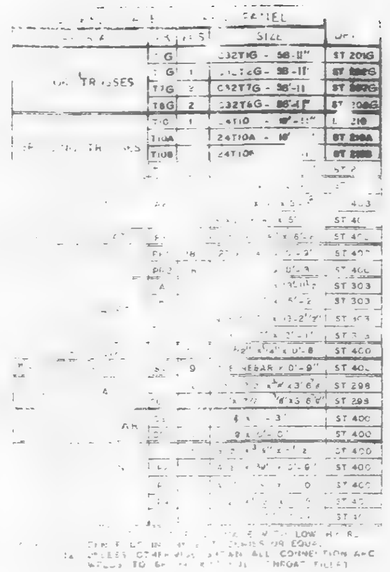
PANEL NO. D1G SIZE 20' x 58'-11"

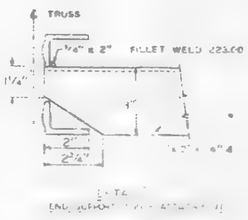












T & B DRWGS.		
7-A82-5&11	7-22-68	
7-A83-2	10-15-68	
7-A84-31	1-3-68	
7-A84-15,16&39	7-22-68	
7-A84-42&3	10-15-68	
SK-124	10-11-68	
7-58-P3&4	7-22-68	
7-P81-1	10-15-68	

FLOOR PANEL DETAILS

AGRICULTURAL CENTER N.Y.C.

THE PORT OF NEW YORK AUTHORITY

BLDG. FLOORS 39-40 (N&S) PANEL DIG - 20' x 58'-11"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MA NDS DESIGN DRAWING NO. 10-15-68 PLATE

DRAWN BY gdc DATE OCT 24, 1968

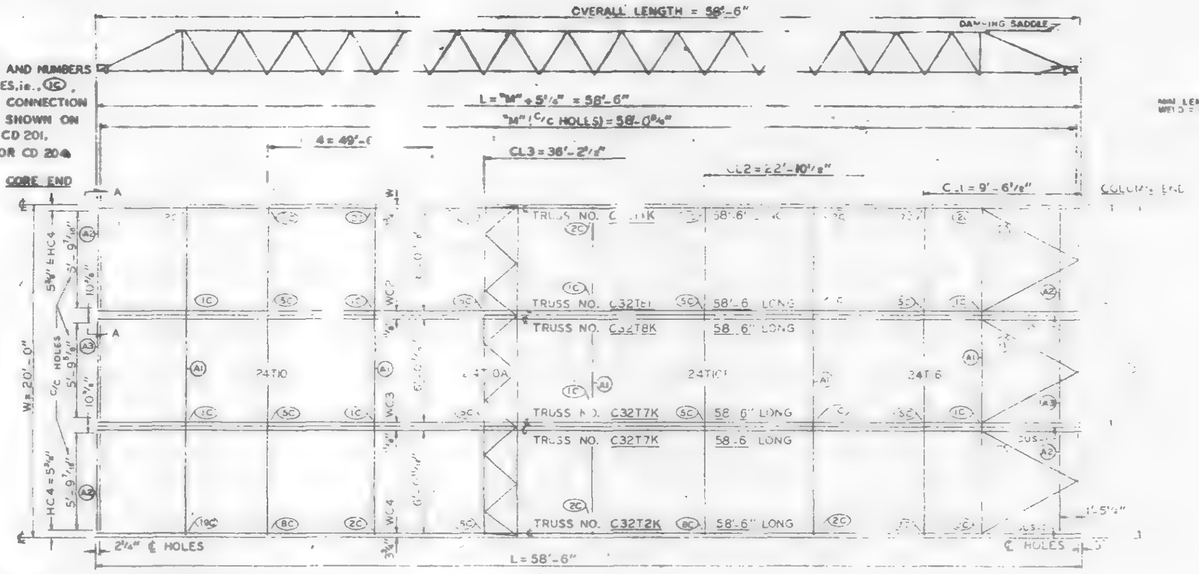
APPROVED FOR FABRICATION DATE 11/7/68 FOR FABRICATOR

DETAILED BY A CARL WEBER CHECKED BY EM CHUNG DATE OCT 24,1968

FABRICATION CONT NO. 321

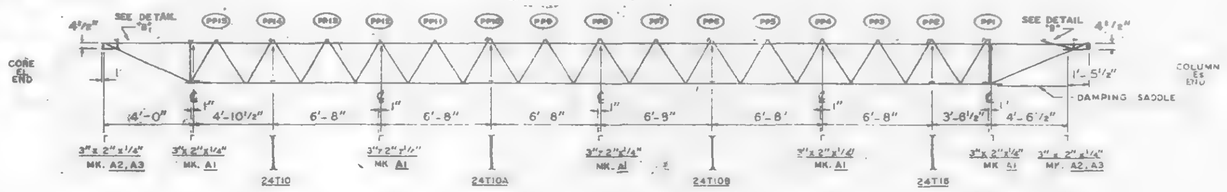
IN CHARGE OF

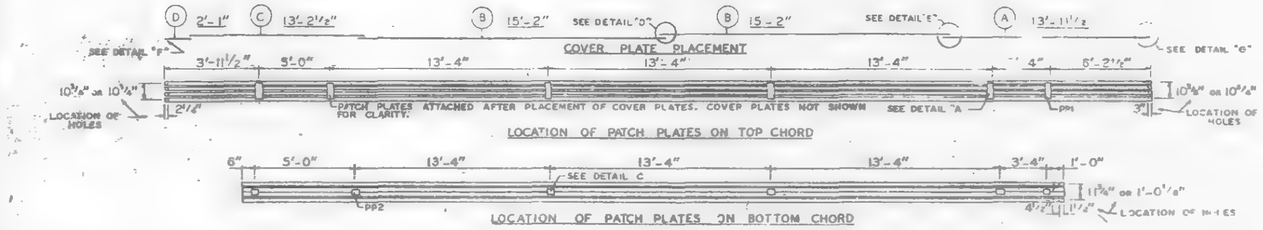
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

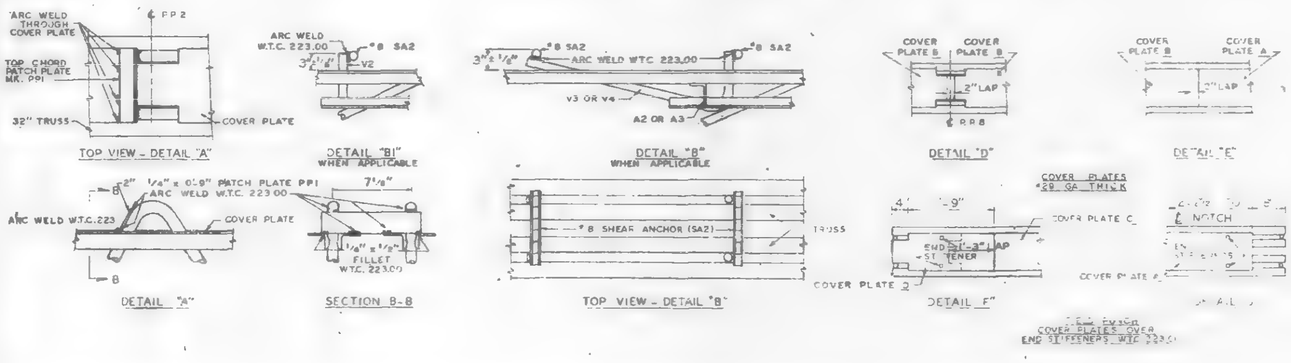


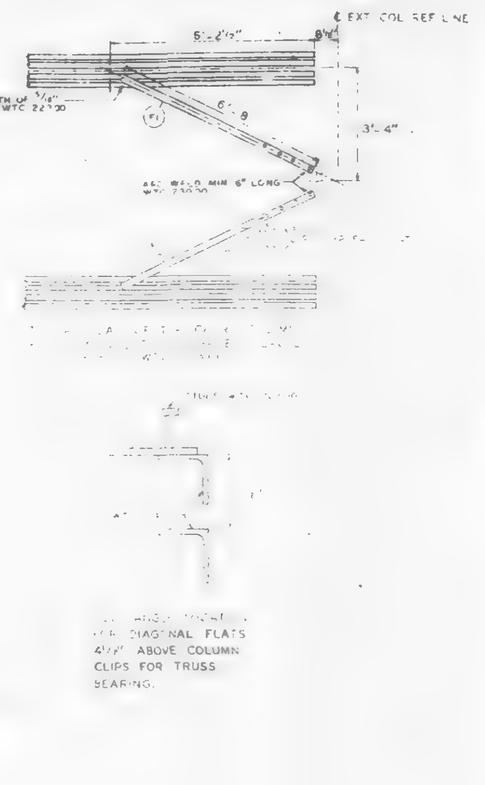
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

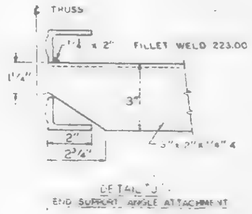
PANEL NO. D1K SIZE 20' x 58'-6"

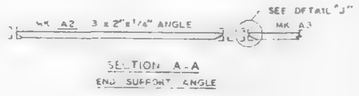


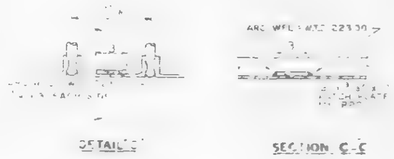












REQUIRED MATERIAL PER PANEL

MATERIAL	MK	PCS	SIZE	
TRUSS CHORDS	1K	1	C32T1K - 18'-6"	ST 201K
	2K	1	C32T2K - 58'-6"	ST 202K
	7K	2	C32T7K - 58'-6"	ST 207K
	8K	2	C32T8K - 58'-6"	ST 208K
WELDING CLIPS	10	1	24T10 - 19'-11"	PP8
	10A	1	24T10A - 19'-11"	ST 210A
	10B	1	24T10B - "	ST 210B
	6	1	24T6 - 19'-11"	ST 216
				ST
				ST 403
				ST 401
				ST 400
				ST 400
				ST 303
				ST 303
				ST 303
				ST 303
				ST 400
			REBAR - 0'-9"	ST 400
				ST 298
				ST 298
				ST 400
				ST 400
				ST 400
				ST 400
				ST 400
				ST 401

...EN RODS IN THE ... SERIES OR EQUA...
...CROSS OTHERWISE SHOWN ALL CONNECTION ARC ... TO BE ... FULL THROAT FILLET

LOW HYDRO

A = 1/4"
B = 1/4"

REF DRWGS.

7-A92-5 & 11	7-22-68
7-A83-8	10-15-68
7-A84-3,1	1-3-68
7-A84-15,16 & 39	7-22-68
7-A84-42 & 3	10-15-68
SK-124	10-11-68
7-181-2,3 & 4	7-22-68
7-181-5	10-15-68

FLOOR PANEL DETAILS

WORLD TRADE CENTER N.Y.C.

THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 46 (IN)

PANEL D1K - 20' x 58'-6"

...ALLEGHENY STEEL COMPANY

...DRAWING NO. 1A83.0 10-15-68

...11/7/68

...CHECKED BY T.M. CALLAHAN

...DATE OCT. 24, 1968

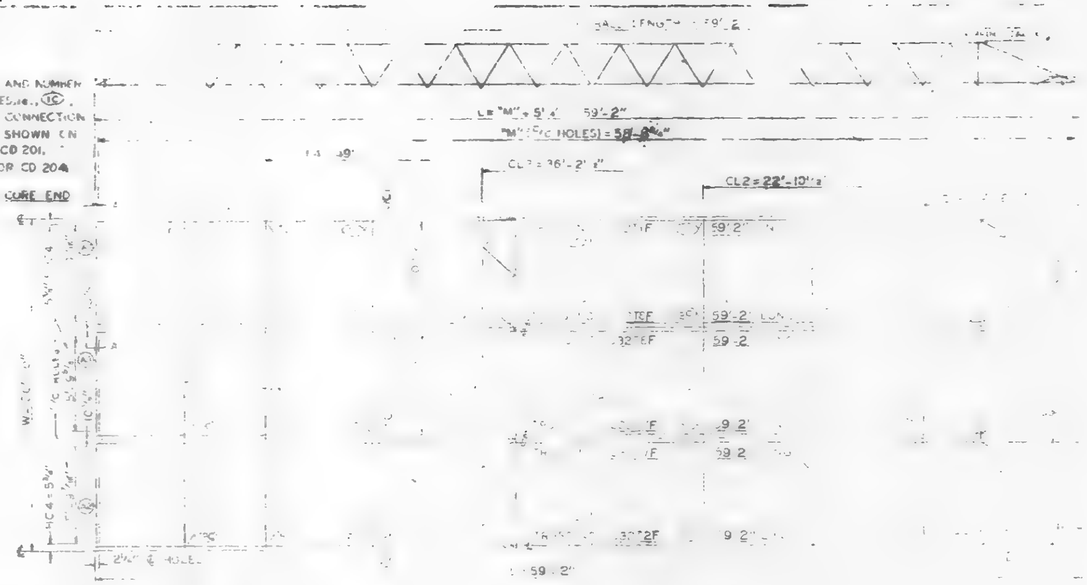
...FABRICATION CONT. NO. WTC 221

PLATE

SHEET NO. FP D1K

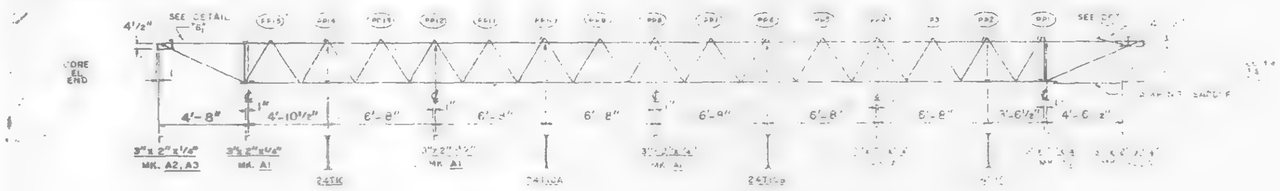
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

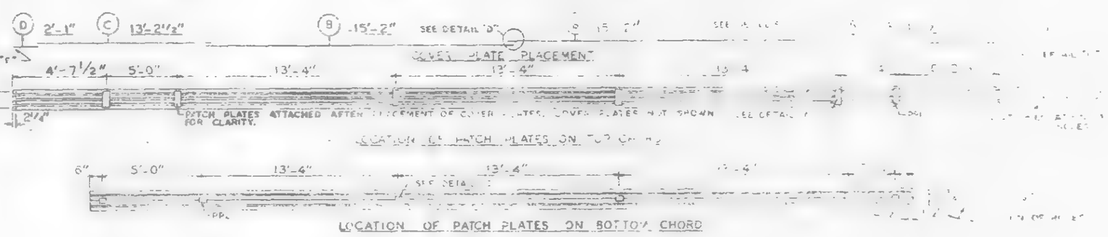
CORE END



℄ & DIMENSION HC4 ARE RELATED TO BEARING END OF FLOOR TRUSSES WHICH ARE WITH BUT NOT EXACTLY ALIGNED WITH THE COLUMN CLIPS & BRACES.

PANEL F 5'-5" x 9'-2"



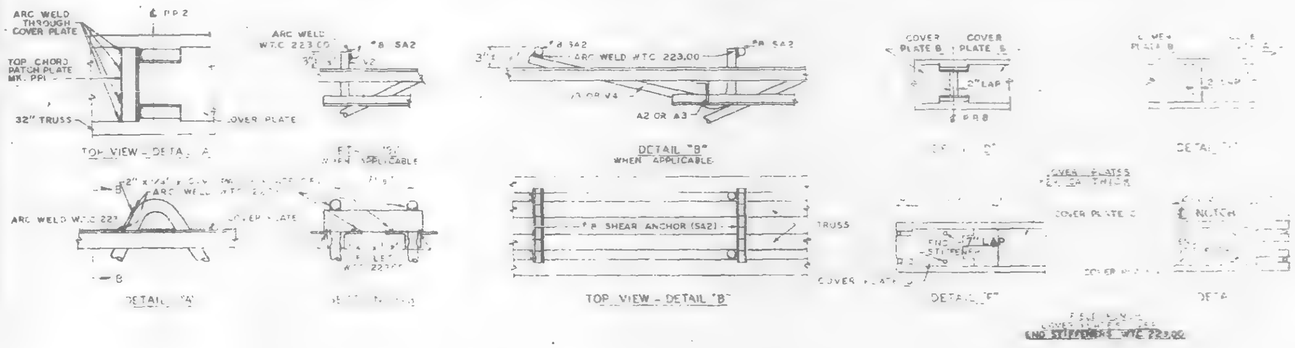


	F	1	T1F - 59'-2"	ST 201F
	F	1	C32T2F - 59'-2"	ST 206F
TRUSS	T1F	2	C32T1F - 59'-2"	ST 207F
	T4F	2	C32.8F - 59'-2"	208F
	T10	1	24T1C - 59'-1"	ST 210
	T10A		24T1C -	ST 210A

TRUSSES

6 EQUA. CONNECTION ARC WHAUT FILLET

7-32-68	
10-15-68	
- -68	
7-22-68	
10-15-68	
10-1-68	
7-22-68	
10-15-68	



FLOOR TRUSS DETAIL

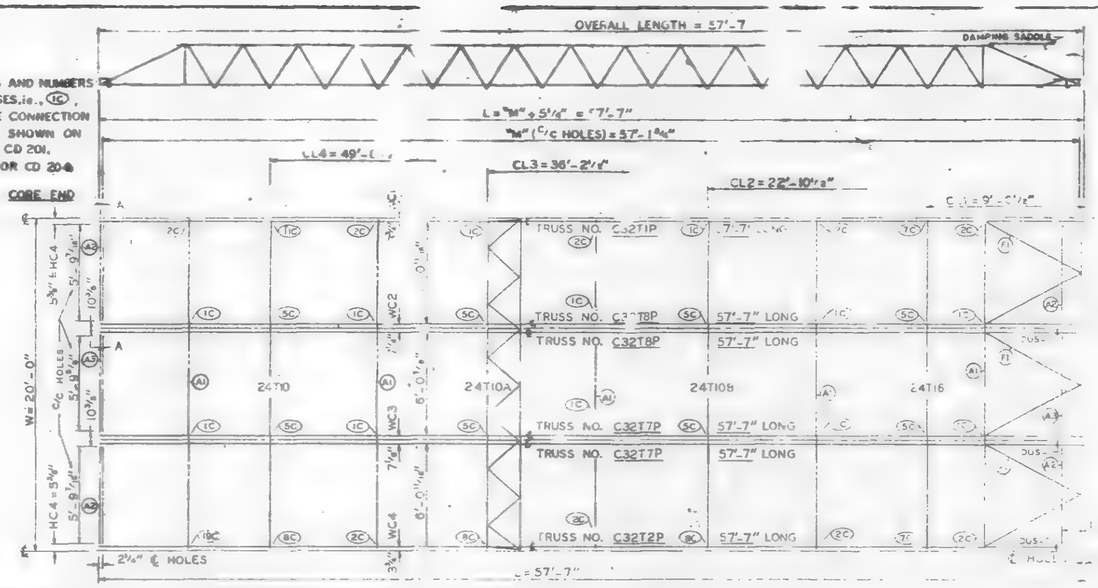
47-48, 70-71 (N)

T1F - 59'-2"

APPROVED	FABRICATION	DATE	CHECKED BY
	FABRICATION	DATE OCT 24, 1968	
DETAILED		ATIONS CONT NO 221	SHEET NO FD DIF

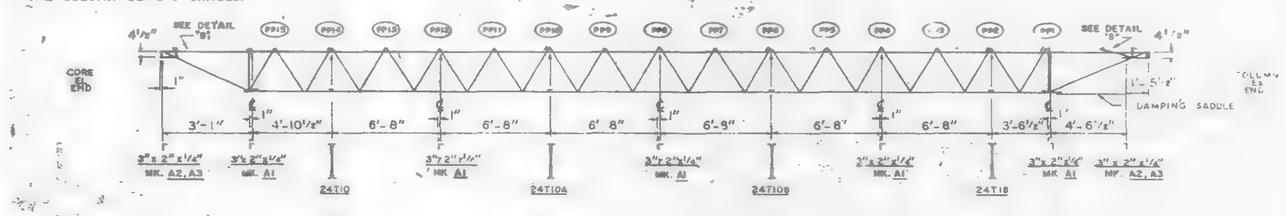
11/7/69

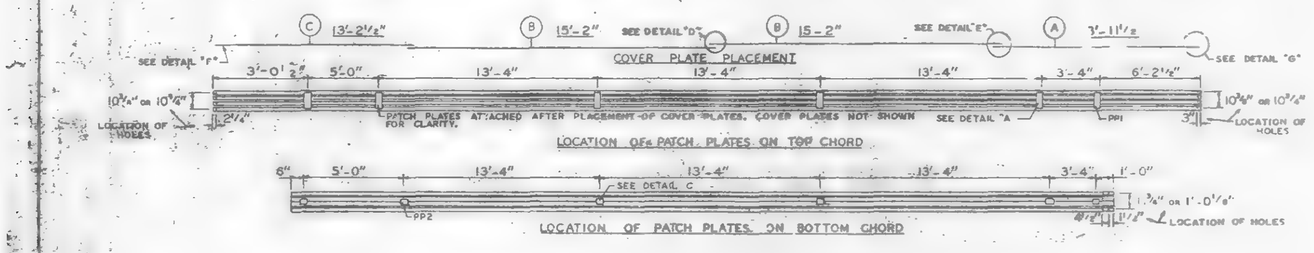
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

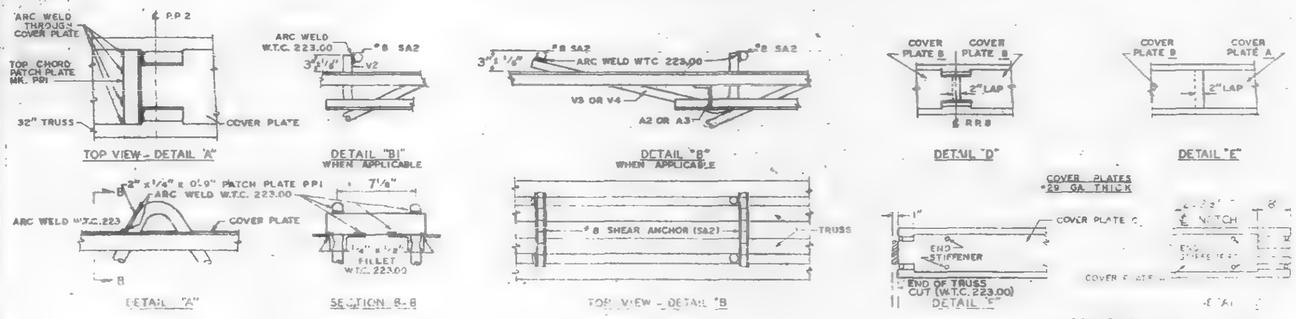


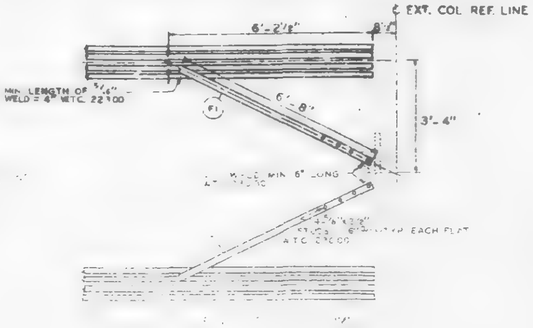
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

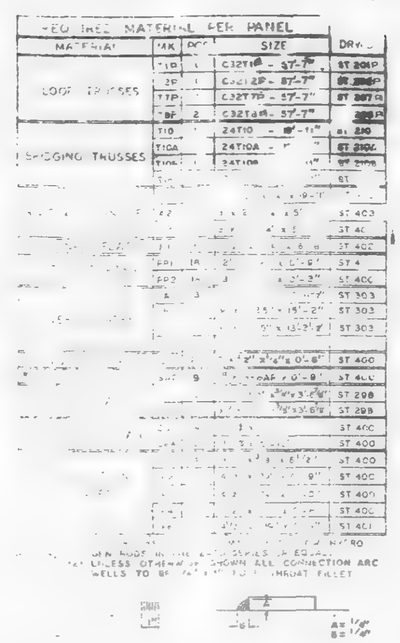
PANEL NO. D1P SIZE 20' x 57'-7"

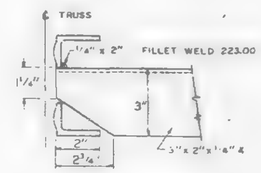


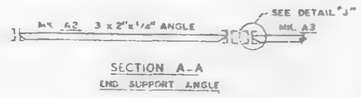












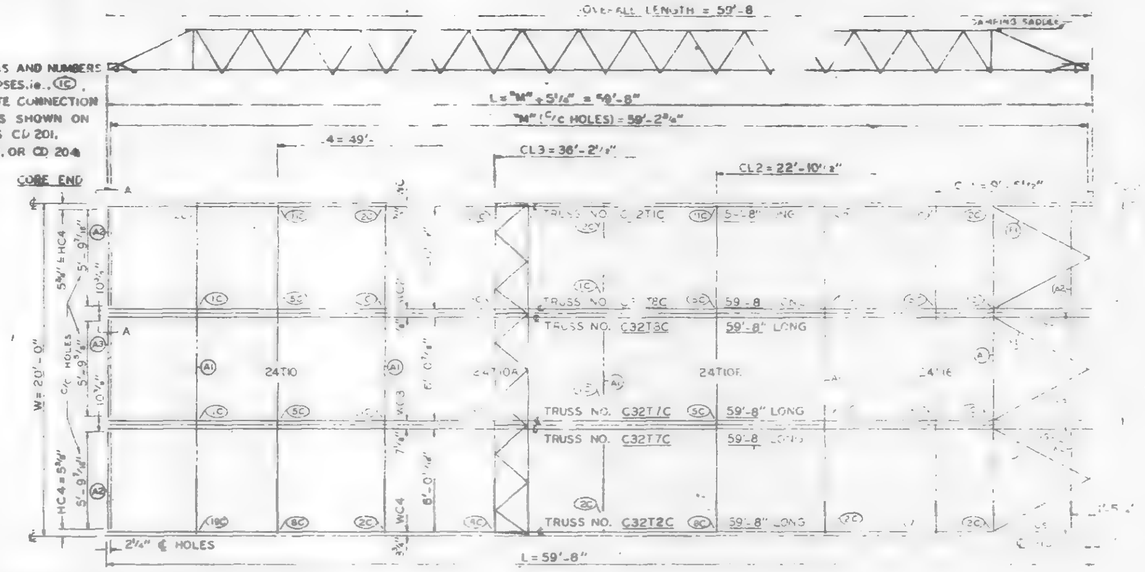
R.I.E. DRWGS.

7-A92-5 & 11	7-22-66
7-A93-9	10-15-66
7-A84- 31	1- 3-68
7-A84-15, 16 & 38	7-22-66
7-A84-42 & 3	10-15-66
56-124	10-11-66
7-181-2, 3 & 4	7-22-66
7-181-5	10-15-66

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
THE PORT OF NEW YORK AUTHORITY

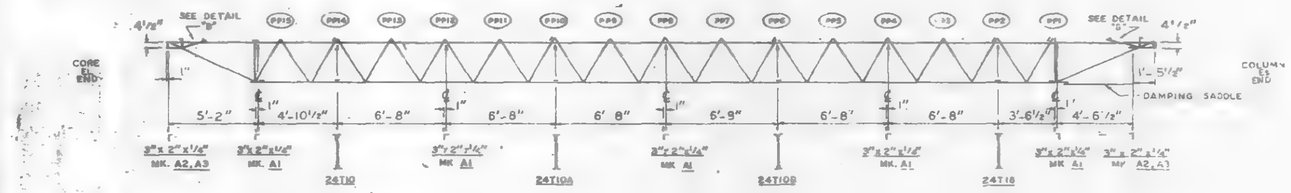
11/7/68

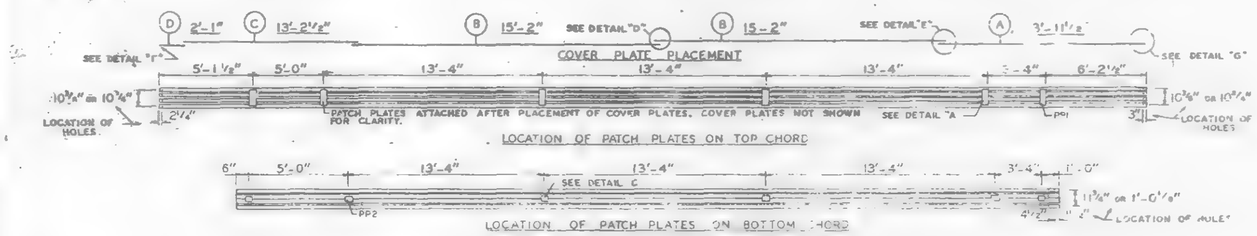
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

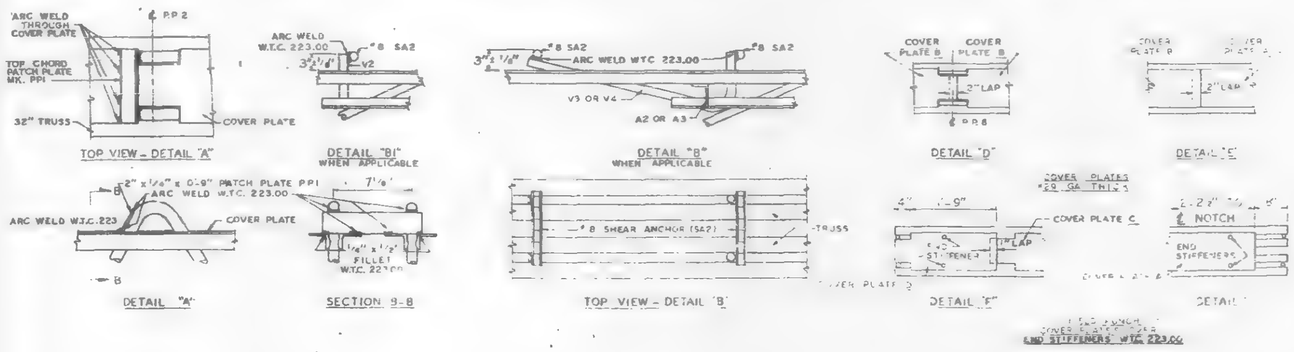


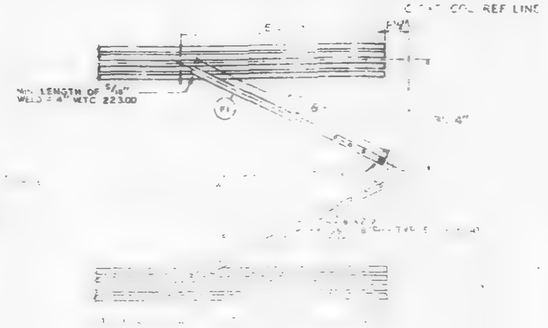
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D1C SIZE 20' x 59'-8"









REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	DR.
FLOOR TRUSSES	T1C	1	C32T1C - 59'-8"	ST 201C
	T3C	1	C32T3C - 59'-8"	ST 203C
	T7C	2	C32T7C - 59'-8"	ST 207C
	T2C	2	C32T2C - 59'-8"	ST 202C
BRIDGING TRUSSES	T1D	1	24T1D - 6'-11"	ST. 21D
	T1DA	1	24T1DA "	ST 21DA
	T1DB	1	24T1DB "	ST 21DB
	T1B	1	" " "	ST
			2 1/2" x 2" x 15-11"	ST
	A2		L 4" x 4" x 5/16"	ST 401
			4" x 4" x 5/16"	ST 4
	B	2	3" x 3" x 5/16" x 8'-8"	ST 403
	PP1	18	2" x 1/2" x 0'-6"	ST 4
	PP2	15	2" x 1/2" x 0'-3"	ST 401
	A	3	3" x 3" x 5/16" x 15'-11"	ST 303
	B	1	3" x 3" x 5/16" x 15'-2"	ST 303
	C	3	3" x 3" x 5/16" x 13-2 1/2"	ST 303
		3	6" x 0.35" x 2'-1"	ST 303
	U1	24	2" x 1/2" x 1'-4" x 0'-6"	ST 400
	SA1	2	5/8 REBAR x 0'-9"	ST 400
	CLIP 2	2	3 1/2" x 3" x 3/16" x 3'-6 3/4"	ST 288
	CLIP 1	2	2 1/2" x 3" x 1/8" x 3'-8 3/4"	ST 288
	C3	4	1" Ø x 1'-3"	ST 401
	SA4	6	1" Ø x 0'-6"	ST 400
	E	4	6" x 3" x 9/16" x 8'-2 1/2"	ST 400
	P2	1	4 3/4" x 39" x 1'-9"	ST 400
	H3	1	4'-2" - 39" x 1'-0"	ST 400
	P4	3	6 1/2" x 3 1/2" x 0'-8"	ST 400
	H6	1	4 1/2" x 39" x 0'-9"	ST 400

ALL FIELD WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
ALL WELDS UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

ALL ANGLE MEMBERS FOR DIAGONAL STAY 4 1/2" ABOVE BOTTOM CLIPS FOR TRUSS BEARING.

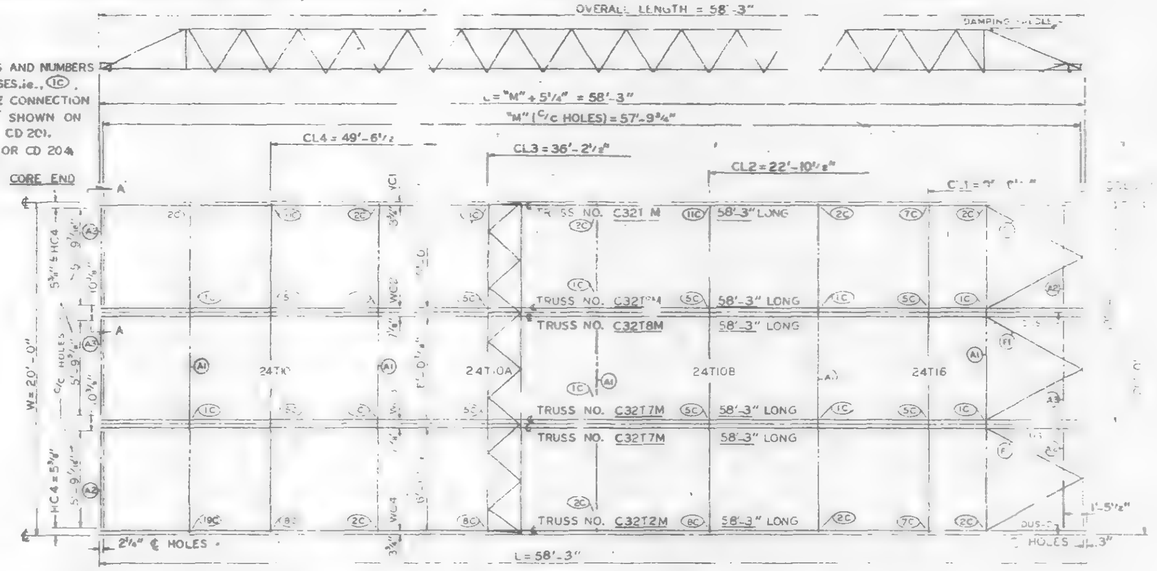
F. F. DRWGS.

7-AB2-5 & 11	7-22-68
7-AB3-9	10-15-68
7-AB4-3,1	1-3-68
7-AB4-15, 6 & 39	7-22-68
7-AB4-42 & 3	10-15-68
5/-124	10-11-68
7-AB-2,3 & 4	7-22-68
7-AB-5	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
CONTRACT NO. 50-58, 60-66, 68-74, 79-91 & 93-106 (S)
PANEL D1C - 20' x 59'-8"

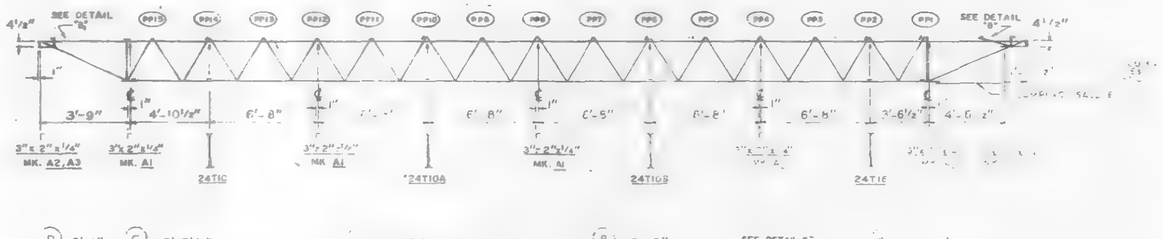
FOR FABRICATION	DATE 11/7/68	CHECKED BY T. NAKAMURA	IN CHARGE OF PROD. DEV.
FOR FABRICATION	DATE OCT 24, 1968	FABRICATION CONT. NO. 221	SHEET NO. FP D1C

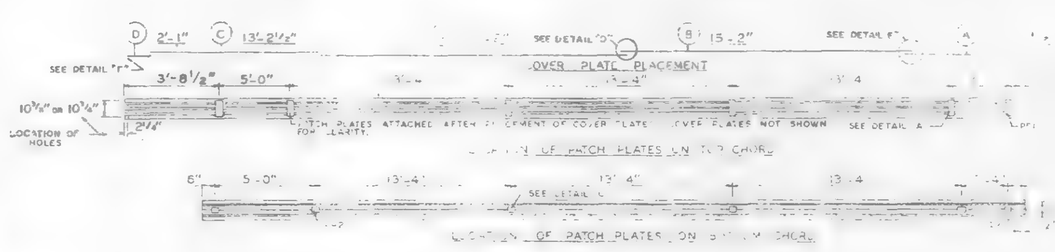
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

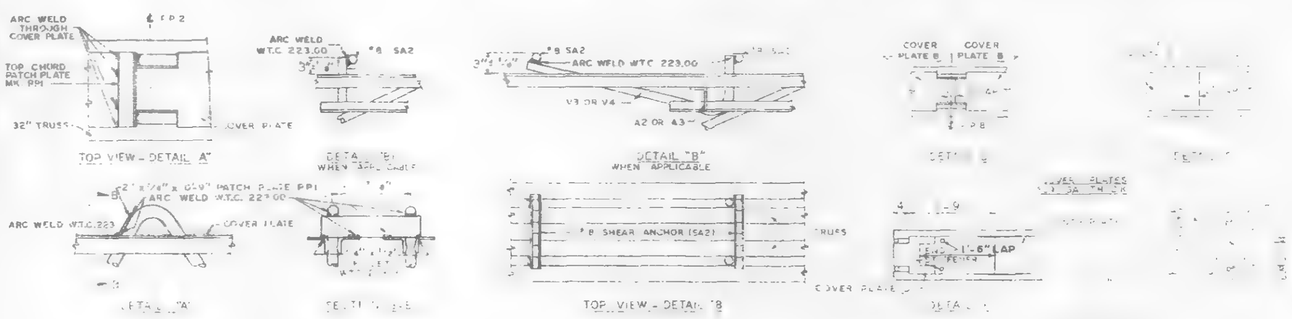


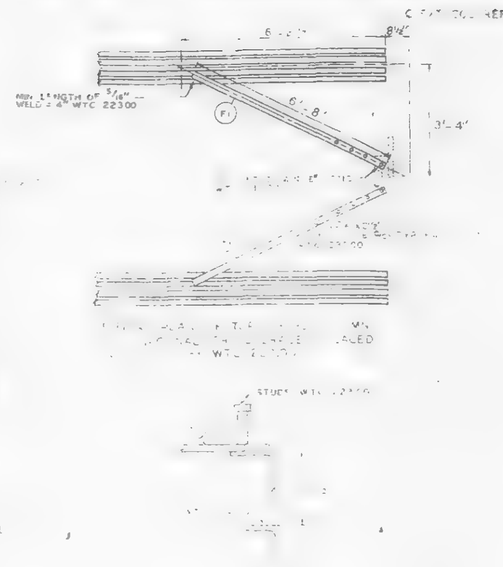
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DIM SIZE 20' x 58'-3"









ALL DIAGONALS AT 4'-2" ABOVE CLIPS FOR TRUSS BEARING.

EQUIPMENT MATERIAL PER PANEL				
MATERIAL	MK	QTY	SIZE	DRWG
FLOOR TRUSSES	T1M	1	C32T1M - 58'-3"	ST 201M
	T2M	1	C32T2M - 58'-3"	ST 202M
	T7M	2	C32T7M - 58'-3"	ST 207M
	T8M	2	C32T8M - 58'-3"	ST 208M
BRIDGING TRUSSES	T1G	1	24T1G - 19'-11"	ST 210
	T10A	1	24T10A - 19'-1"	ST 210A
	T10B	1	24T10B - 19'-1"	ST 210B
	T1C	1	24T1C - 19'-1"	ST 210
	A	4	4" x 2" x 1/4" x 5'-11"	ST 403
	B	2	2" x 2" x 1/4" x 2'-8"	ST 402
	C	2	2" x 2" x 1/4" x 6"	ST 400
	PP2	6	3" x 5" x 3/16" x 1'-0"	ST 400
	A	2	6" x 0.35 x 19'-2"	ST 303
	B	1	6" x 0.35 x 19'-2"	ST 303
	C	1	6" x 0.35 x 13'-2"	ST 303
	D	2	2" x 2" x 1/4" x 2'-11"	ST 302
	E	2	2" x 2" x 1/4" x 0'-8"	ST 400
	F	9	1/2" REBAR x 0'-8"	ST 400
	G	4	4" x 3" x 3/16" x 2'-6"	ST 298
	H	4	3 1/2" x 3 1/2" x 3/16" x 3'-6"	ST 298
	J	4	4" x 1" x 3"	ST 400
	K	4	6" x 1" x 0'-10"	ST 400
	L	4	3" x 3" x 1/4" x 6'-11 1/2"	ST 400
	M	4	4" x 2" x 3/8" x 1'-0"	ST 400
	N	4	4" x 2" x 1/4" x 1'-0"	ST 400
	P	4	4" x 2" x 1/4" x 0'-8"	ST 400
	Q	4	4" x 2" x 1/4" x 0'-4"	ST 400

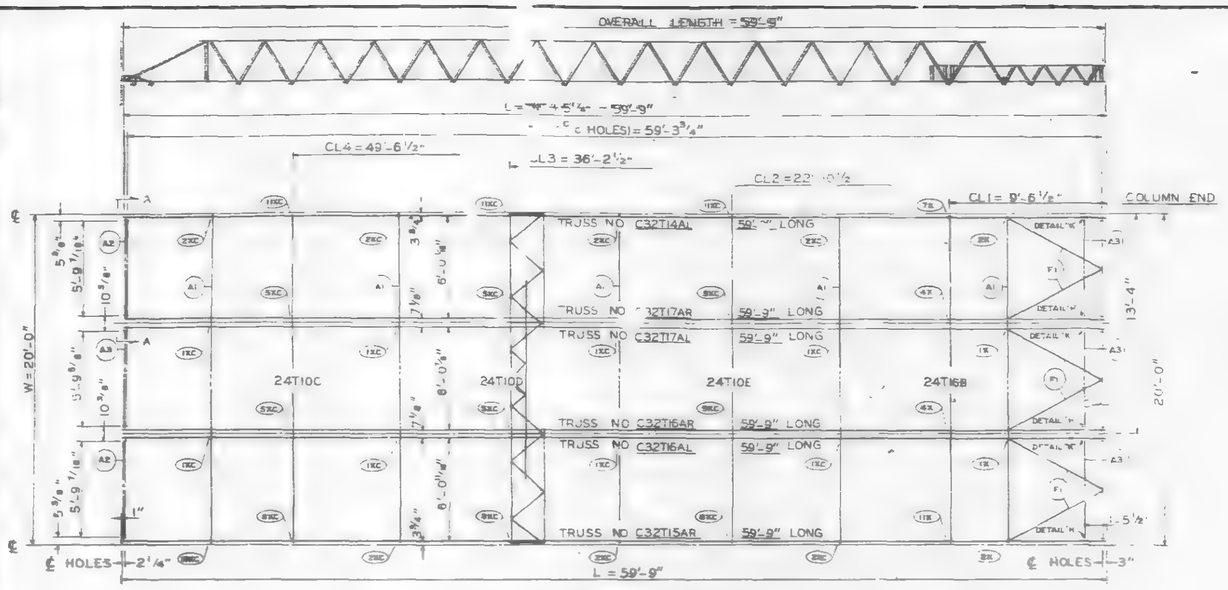
MATERIAL TO BE LOW HYDROGEN PER AWS D1.0 GRADE E-70 XX ELECTRODES OR EQUAL.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET

A62.5 & 11	7-22-68
	10-15-68
	7-68
A84-1, 6 & 39	7-22-68
A84-2 & 3	10-15-68
	10-11-68
& 4	7-22-68
	10-15-68

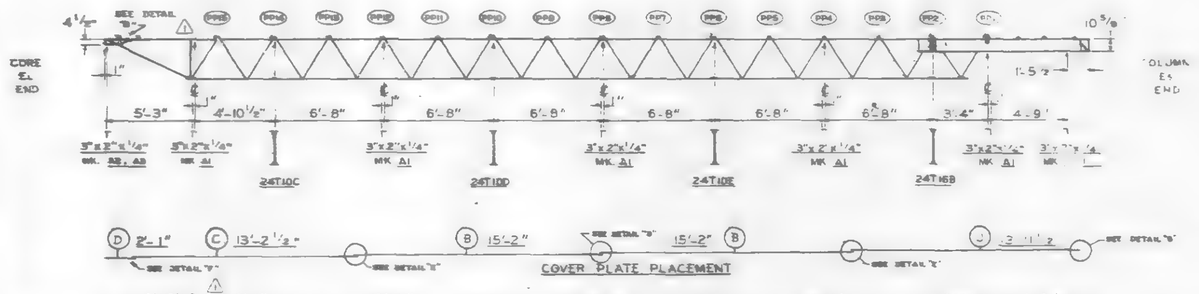
72-73 (N)

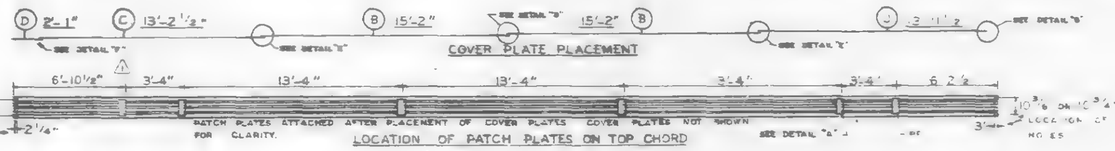
PANEL DIM 58'-3"

11/7/68



PANEL NO. D2A SIZE 20' x 59'-9"

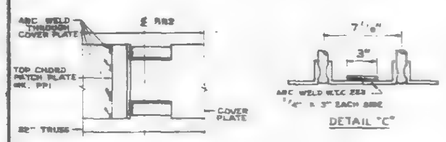




COVER PLATE PLACEMENT

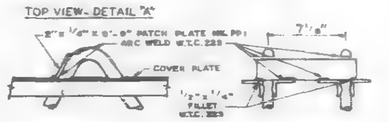
LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD



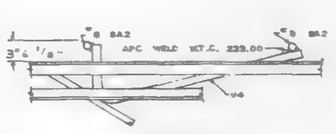
TOP VIEW - DETAIL "A"

DETAIL "C"



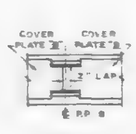
DETAIL "A"

SECTION B-B

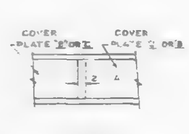


DETAIL "B"

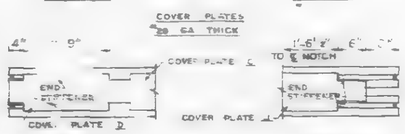
TOP VIEW DETAIL "B"



DETAIL "D"

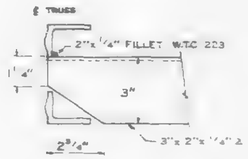


DETAIL "E"

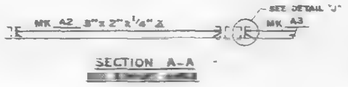


DETAIL "F"

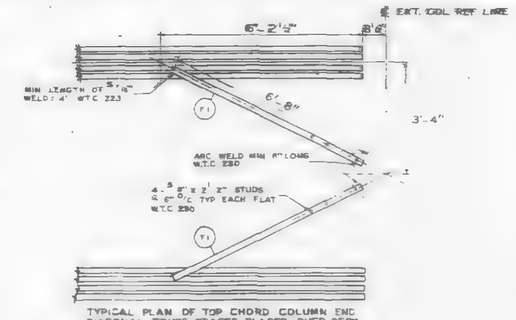
DETAIL "G"



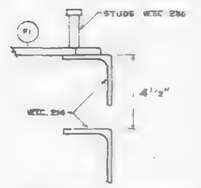
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



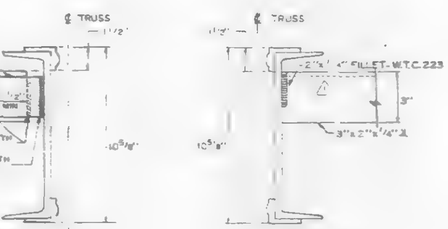
SECTION A-A



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.



DETAIL "K"
END SUPPORT ANGLE ATTACHMENT

DETAIL "H"
END SUPPORT ANGLE ATTACHMENT

SECTION C-C
END SUPPORT ANGLE

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T14AL	1	C32T14AL x 59'-9"	ST 2144L
	T17AR	1	C32T17AR x 59'-9"	ST 2147AL
	T17AL	1	C32T17AL x 59'-9"	ST 2147AL
	T16AR	1	C32T16AR x 59'-8"	ST 2146AL
	T16AL	1	C32T16AL x 59'-9"	ST 2146AL
	T15AR	1	C32T15AR x 59'-8"	ST 2145AL
BRIDGING TRUSSES	T10C	1	24T10C x 19'-11"	ST 210C
	T10D	1	24T10D x 19'-11"	ST 210
	T10E	1	24T10E x 19'-11"	ST 210E
	T16B	1	24T16B x 19'-11"	ST 2168
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-...	ST 403
	A2	2	3" x 2" x 1/4" x 5'-...	ST 403
	A3	1	3" x 2" x 1/4" x 5'-...	ST 403
	A31	3	3" x 2" x 1/4" x 5'-8 1/8"	ST 410
CLOSURE PLATES	PP11	3	3" x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F	6	1 1/2" x 3/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	24	2" x 1 1/2" x .25" x 6"	ST 400
3/8 SHEAR ANCHOR	SA2	6	3/8 REBAR x 0'-8"	ST 400
CONNECTION BAR	CB1	5	1" x 3/8 x 1'-3"	ST 400
	CB4	8	1" x 3/8 x 0'-10"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	1	4 1/2" x .39" x 0'-8"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P6	1	4 1/2" x .39" x 0'-8"	ST 401
	P9	6	3" x 1/2" x 1'-2"	ST 408

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS. ⟨1K⟩
ALL CONNECTION DETAILS FOR FLOORS 25, 58 & 60 ARE SHOWN ON SHEETS CD 210 THRU CD 229. UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.

NO.	DATE	REVISION	BY
1	2-4-69	AS NOTED	BDC

REF. DRWG.

7-AB3-30	10-4-68
7-AB4-28	7-22-68
7-AB1-13	10-4-68
7-AB1-14, 15 & 16	10-4-68
7-AB2-13	10-4-68
7-AB2-17	10-4-68
SA-124	10-11-66

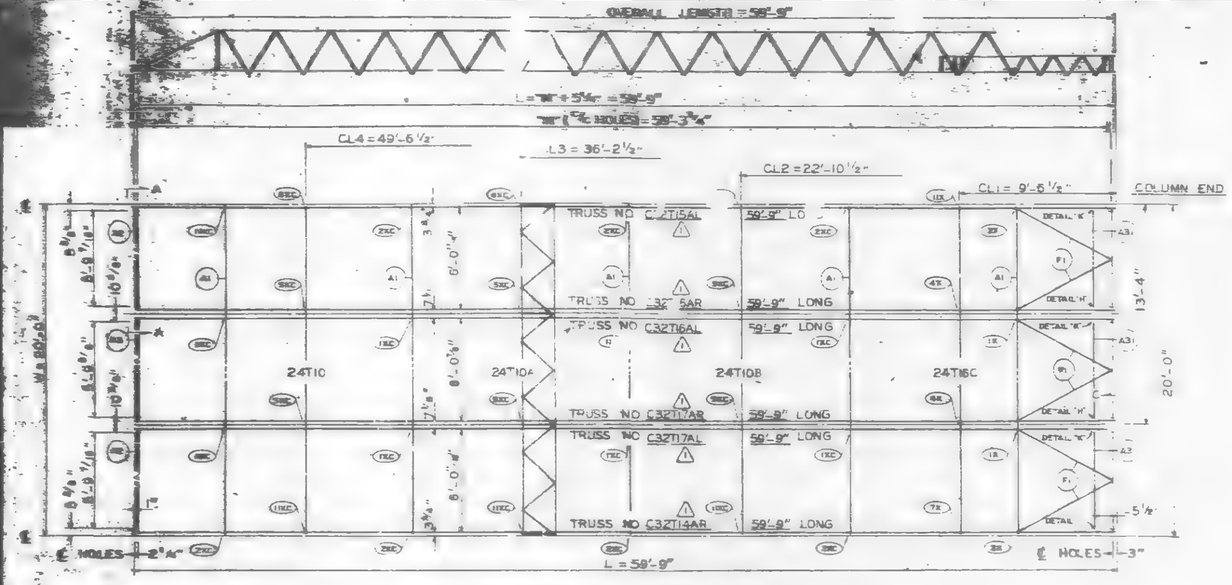
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)

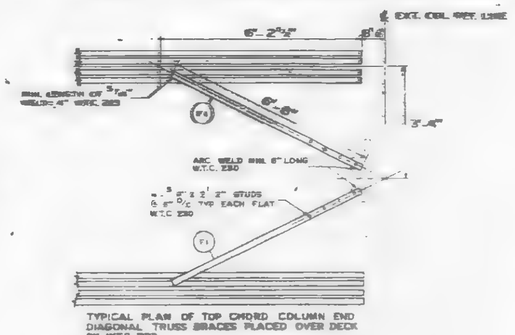
PANEL D2A - 20' x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY

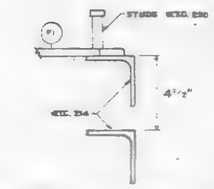
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-30	PLATE
APPROVED FOR FABRICATION BY ... FOR P.O.N.Y.A.	DATE 2/25/69	DRAWN BY ... DATE DEC. 3, 1968	
APPROVED FOR FABRICATION BY ... FOR FABRICATOR	DATE	CHECKED BY T.N. CHUBA DATE DEC. 3, 1968	IN CHARGE OF ...
		FABRICATION CONT. NO W.T.C. 221	SHEET NO FP D2A



PANEL NO. DR2A SIZE 20' x 59'-9"



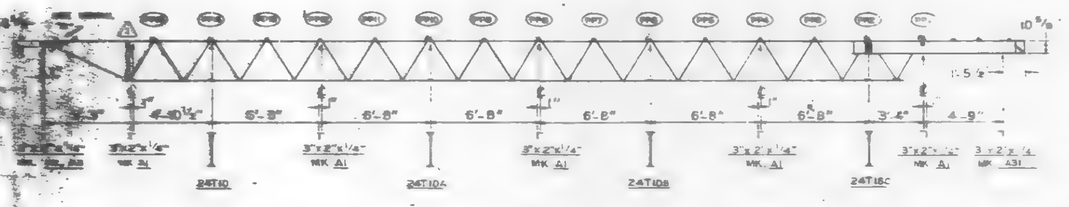
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

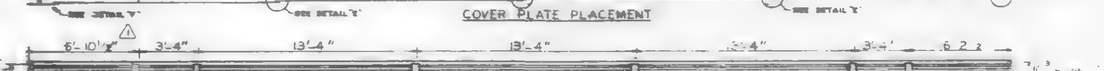


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	SHEET
FLOOR TRUSSES ⚠		6		ST 201
		6		ST 201
		6		ST 201
		6		ST 201
		6		ST 201
		6		ST 201
BRIDGING TRUSSES	T10	1	24T10 x 19'-11"	ST 210C
	T10A	1	24T10A x 19'-11"	ST 210D
	T10B	1	24T10B x 19'-11"	ST 210E
	T10C	1	24T10C x 19'-11"	ST 210B
3" x 2" x 1/4" ANGLE	A1	5	3"x2"x1/4"x 19'-11"	ST 403
	A2	2	3"x2"x1/4"x5'-11 7/8"	ST 403
	A3	1	3"x2"x1/4"x 4'-3 3/4"	ST 403
	A31	3	3"x2"x1/4" x 4'-8 1/8"	ST 410
CLOSURE PLATES	PC11	3	3" x 1/4" x 0'-2 3/4"	ST 412
DIAGONAL FLATS	F	6	11 1/2" x 3 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-8"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 25'-3"	ST 303
	C	3	9" x .0239" x 13'-3 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 308
	J	3	9" x .0135" x 13'-4 1/8"	ST 304
ANGLE CLIPS	C1	24	2" x 1" x 4" x .25" x 6"	ST 400
ø 8 SHEAR ANCHOR	SA2	6	ø 8 REBAR x 0'-8"	ST 409
CONNECTION BAR	CB1	3	1" ø x 1'-3"	ST 400
	CB4	6	1" ø x 0'-10"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3/8" x 0'-8 1/8"	ST 400
	P2	1	4 1/2" x .38" x 0'-8"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P5	1	4 1/2" x .38" x 0'-8"	ST 401
	P9	6	3" x 1/2" x 1'-2"	ST 409

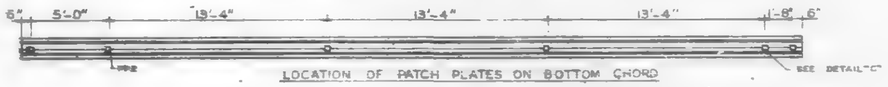
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie - (A)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 60 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 5/16" FULL THROAT FILLET.



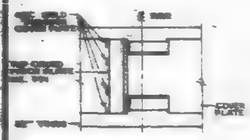


COVER PLATE PLACEMENT

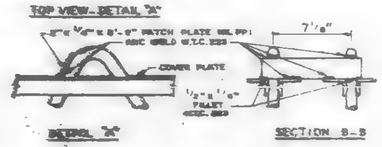
LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD

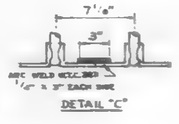


TOP VIEW - DETAIL "A"

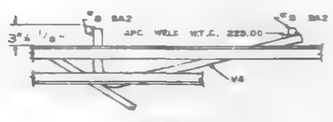


DETAIL "A"

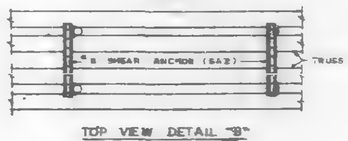
SECTION B-B



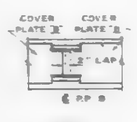
DETAIL "C"



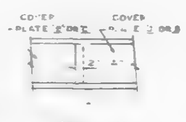
DETAIL "B"



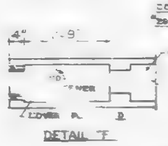
TOP VIEW DETAIL "B"



DETAIL "D"

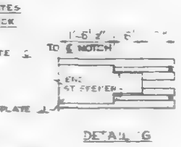


DETAIL "E"



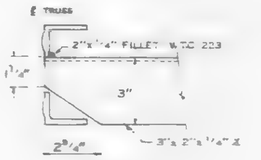
DETAIL "F"

COVER PLATES 5/16 GA THICK

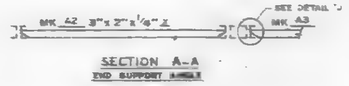


DETAIL "G"

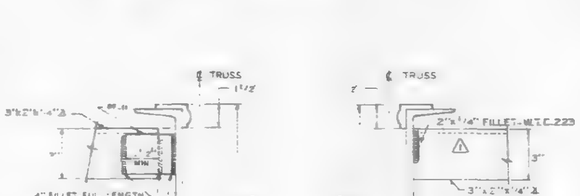
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 224.00



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE



DETAIL "K"
END SUPPORT ANGLE ATTACHMENT

DETAIL "H"
END SUPPORT ANGLE ATTACHMENT

SECTION C-C
END SUPPORT ANGLE

NO.	DATE	REVISION	BY
⚠	2-4-69	AS NOTED	ESDC

REF DRWG.

7-A83-31	ID-4-68
7-A84-28	7-32-68
7-A81-13	ID-4-68
7-A81-14, 15 & 16	ID-4-68
7-A82-19	ID-4-68
7-A82-17	ID-4-68
36-126	ID-11-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

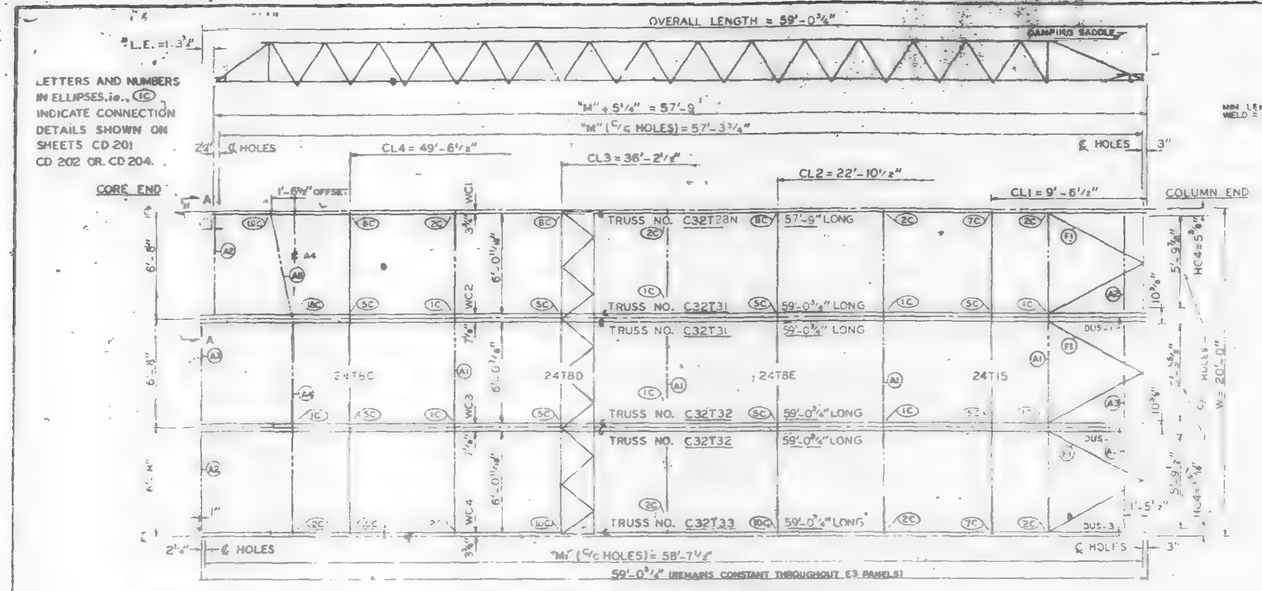
BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)

PANEL DR2A - 20' x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY

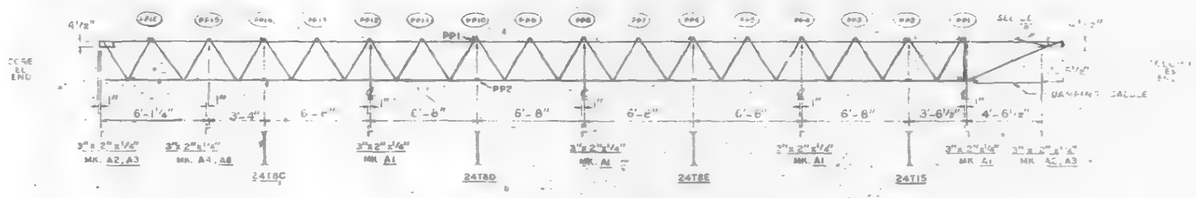
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-A83-31	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A.	DATE 2/20/69	DRAWN BY [illegible] DATE DEC. 5, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY [illegible] DATE DEC. 5, 1968	
DETAILED BY [illegible]		FABRICATION CONT NO W.T.C. 221	

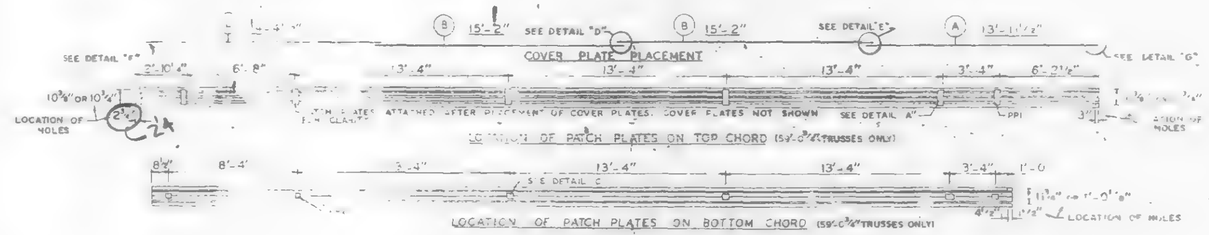
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 CD 202 OR CD 204.

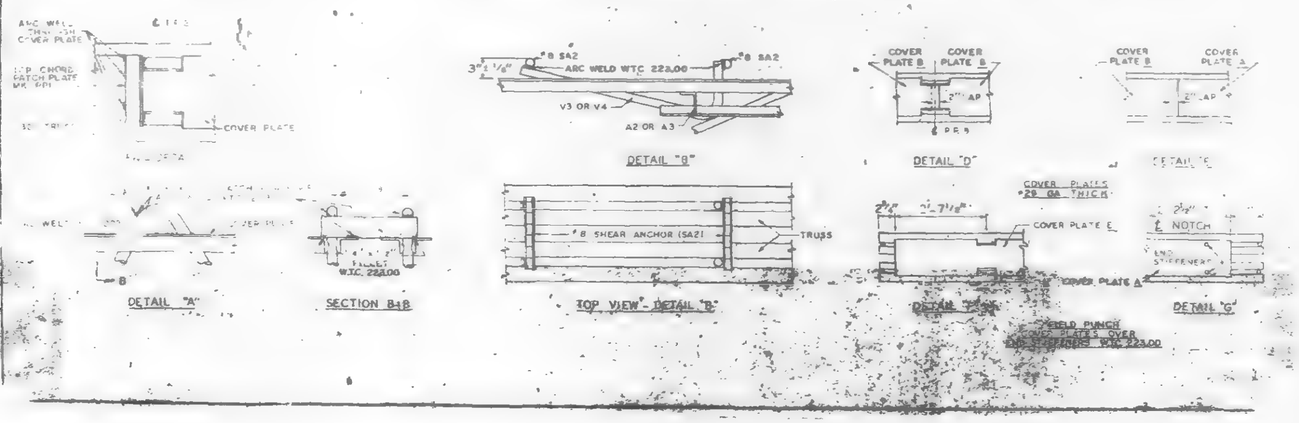


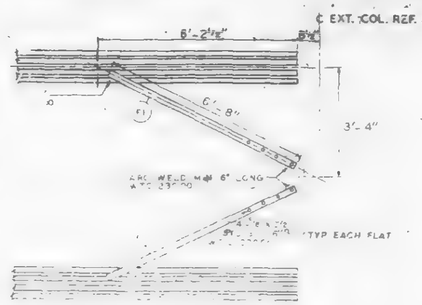
PANEL NO. E3N SIZE 20' x 59'-0¾"

"DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T28.





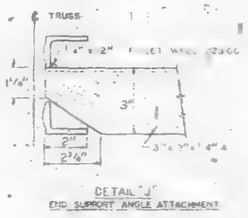




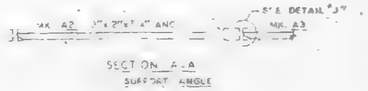
REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T28N	1	C32T28N - 57'-9"	ST 328N
	T31	2	C32T31 - 59'-0¾"	ST 231
	T32	2	C32T32 - 59'-0¾"	ST 732
	T33	1	C32T33 - 59'-0¾"	ST 233
BRIDGING TRUSSES	T8C	1	24T8C - 19'-11"	ST 208C
	T8D	1	24T8D - 19'-1"	ST 208D
	T8E	1	24T8E - 19'-11"	ST 208E
	T15	1	24T15 - 19'-11"	ST 215
3"x 2"x1/4" ANGLE	A1	4	3"x 2" x1/4" x 19'-11"	ST 403
	A2	4	3"x 2" x1/4" x 5'-1"	ST 403
	A3	2	3"x 2"x1/4" x 5'-1"	ST 403
	A4	1	3'-2" x1/4" x 13"	ST 403
	A8	1	3"x 2"x1/4" x 6'-0¾"	ST 405
DIAGONAL FLATS	F1	6	1½" x 7/8" x 6'-8"	ST 406
SPLICE PLATES	A	3	9" x 0.135" x 13'-11½"	ST 303
	B	6	9" x 0.135" x 15'-2"	ST 303
	E	3	9" x 0.135" x 16'-0½"	ST 303
END SPLICE CHAIR	C1	10	2" x 3½" x 1/4" x 0'-8"	ST 401
	C2	4	2½" x 3½" x 1/4" x 6"	ST 401
END SUPPORT SADDLE	S1	2	3½" x 7" x 3.6"	ST 398
	S3	2	3½" x 7" x 6"	ST 399
CONNECTION BAR	B1	1	1" x 8" x 3'-1"	ST 400
	B2	6	1" x 8" x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3" x 8" x 2'-2"	ST 400
	P2	1	4" x 4" x 2'-8"	ST 400
	P3	1	4" x 4" x 1'-0"	ST 400
	P5	1	4" x 4" x 1'-6½"	ST 400
	P6	1	4" x 4" x 1'-0½"	ST 401
BEARING PLATE FOR END SUPPORT	SA2	2	1" x 14" x 8"	ST 400
PATCH PLATES	PP1	18	3" x 8" x 1'-0"	ST 410
	PP2	18	3" x 8" x 2'-0"	ST 410

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/2" x 1" FULL THROAT FILLET.



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
SUPPORT ANGLE

DETAIL "C" SECTION "C"

SKILLING · HELLE · CHRISTIANSEN · ROBERTSON
Structural & Civil Engineers
APPROVED
APPROVED AS NOTED
RESUBMIT
RETURNED
DOS 93264 SK

NO.	DATE	REVISION	BY

REF. DRWGS.

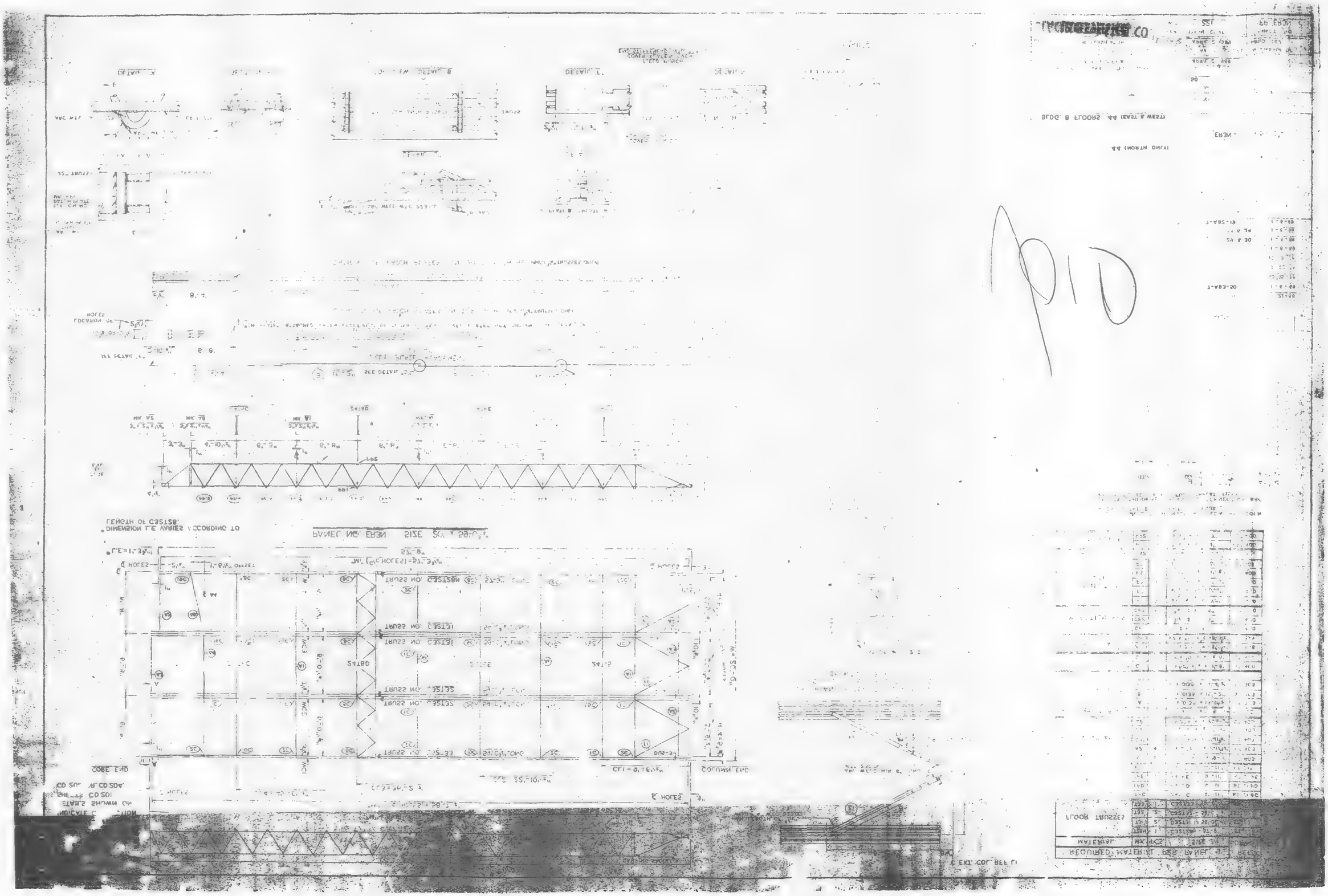
7-A82-10	7-22-68
7-A82-49	1-6-69
7-A84-1	10-15-68
7-A84-16	7-22-68
7-A84-42	10-15-68
SA-124	1-6-69
7-AB1-25 & 28	1-6-69
7-AB1-29 & 30	1-6-69
7-A82-19	1-6-69

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C
FOR
THE PORT OF NEW YORK AUTHORITY

EAST
BLDG. A FLOORS 44 (NORTH ONLY)
PANEL E3N - 20'-0" x 59'-0¾"
BLDG. B FLOORS 44 (WEST ONLY)

FABRICATION BY ACME STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7 A85 49	PLATE
APPROVED FOR FABRICATION BY FOR P.A.N.Y.A.	DATE	DRAWN BY gdc DATE APRIL 2, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M.CHUNG DATE APRIL 2, 1969	NO CHANGE OF PROD. DEV.
DETAILED		FABRICATOR DWG. NO. W.T.C.	SHEET NO. TP E3N



LETTERS AND NUMBERS IN ELLIPSES, ie., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 CD 202 OR CD 204

CORE END

COLUMN END

CL4 = 49'-6 1/8"

CL3 = 36'-2 1/8"

CL2 = 22'-10 1/8"

CL1 = 9'-6 1/8"

1'-6 1/2" OFFSET

"M" + 5 1/8" = 57'-9"

"M" (C/C HOLES) = 57'-3 1/8"

See SHOP Dwgs 7-AB3-60 7-AB4-22

TRUSS NO. C32T28N 57'-9" LONG

TRUSS NO. C32T31 59'-0 1/4" LONG

TRUSS NO. C32T32 59'-0 3/4" LONG

TRUSS NO. C32T33 59'-0 3/4" LONG

24T8C 24T8D 24T8E 24T1S

WC1 WC2 WC3 WC4

"M" (C/C HOLES) = 58'-7 1/2"

59'-0 3/4" (REMAINS CONSTANT THROUGHOUT EB PANELS)

* DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T28.

PANEL NO. EBN SIZE 20' x 59-0 3/4"

6'-2 1/2" ℄ EXT. COL. REF. LINE

MIN. LENG. WELD = 4"

3'-4"

END WELD MIN 6" L ea

TYP EACH FLG

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T28N	1	C32T28N - 57'-9"	ST 228N
	T31	2	C32T31 - 59'-0 1/4"	ST 231
	T32	2	C32T32 - 59'-0 3/4"	ST 232
	T33	1	C32T33 - 59'-0 3/4"	ST 233
BRIDGING TRUSSES	T8C	1	24T8C - 10'-11"	ST 208C
	T8D	1	24T8D - 10'-11"	ST 208D
	T8E	1	24T8E - 10'-11"	ST 208E
	T1S	1	24T1S - 10'-11"	ST 21S
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1'-1"	ST 403
	A2	4	3" x 2" x 5'-1"	ST 403
	A3	2	3" x 2" x 5'-1"	ST 403
	A4		3" x 2" x 1'-1"	ST 403
	A8		3" x 2" x 1'-1"	ST 403
DIAGONAL FLATS	F1	6	1" x 6" x 6'-8"	
PLATES	A	3	9" x .0135" x 13'-11"	ST 303
	B	3	8" x .0135" x 15'-2"	ST 303
	E		x .0135" x 14'-4"	ST 303
	C1		x 1/2" x 6"	
	C2	4	x 1/2" x 6"	
ANGLE				
CONNECTOR BAR				
CONNECTION PLATES				
MISC. STEEL				
PATCH PLATES	PP1	18		
	PP2	18		

(1) ALL ARC WELD TO BE MADE WITH LOW HY-10 SR RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

A = 1/4"
B = 1/4"

PP1

PP2

6'-1 1/8" 6'-8" 6'-8" 6'-8" 6'-1 1/8"

3" x 2" x 1/4" MK. A2, A3 | 3" x 2" x 1/4" MK. A4, A8 | 3" x 2" x 1/4" MK. A1 | 3" x 2" x 1/4" MK. A8 | 3" x 2" x 1/4" MK. A1 | MK.

24T8C 24T8D 24T8E 24T1S

(3) 15'-2" SEE DETAIL "D" (B) 15'-2" SEE DETAIL "E" (A) 13'-11 1/8"

COVER PLATE PLACEMENT

SEE DETAIL "C"

10 3/4" OR 10 3/4"

LOCATION OF HOLES

2 3/4" L

13'-4" 13'-4" 3'-4" 6'-2 1/8"

TYP. PATCH PLATES ATTACH. AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN SEE DETAIL "A"

3"

LOCATION OF PATCH PLATES ON TOP CHORD (59'-0 3/4" TRUSSES ONLY)

8'-8"

13'-4" 13'-4" 3'-4"

SEE DETAIL "C"

LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0 3/4" TRUSSES ONLY)

DETAIL "A"

SECTION B-B

1/4" FILLET WTC 223.00

DETAIL "B"

3" x 1/4" PL

8 SA2

ARC WELD WTC 223.00

V3 OR V4

A2 OR A3

TOP VIEW - DETAIL "B"

8 SHEAR ANCHOR (SA2)

TRUSS

DETAIL "D"

COVER PLATE B

2" LAP

PP2

DETAIL "E"

COVER PLATE B

1" GAP

COVER PLATES PP2 OR TRUSS

2 1/2" 2'-7 1/8"

COVER PLATE E

DETAIL "F"

FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 223.00

℄ NOTCH

END STIFFENER

COVER PLATE A

DETAIL "G"

℄ TRUSS

DETAIL "J"

END SUPPORT ANGLE ATTACHMENT

SEE DETAIL "J"

SECTION A-A

END SUPPORT ANGLE

ARC WELD WTC 223.00 1/4" x 3" EACH SIDE

DETAIL "C"

3" x 2" x 5/16" PATCH PLATE 4R PP2

SECTION C

SKILLING · HELLE CHRISTIANSEN · ROBERTSON
Structural & Civil Engineers

APPROVED
APPROVED AS NOTED
RESUBMIT
FOR APPROVAL

NO.	DATE	REVISION	BY
		REF. DRAWG. 10	7-22-68
		80	1-8-69
			10-15-68
			7-22-68
			10-15-68
		1	1-8-69
		25 & 28	1-6-69
		29 & 30	1-6-69
		7-AB2-19	1-6-69

FLOOR PANEL DETAILS
FOR
NEW [illegible] CENTER - N.Y.
FOR
THE PORT OF NEW YORK AUTHORITY

C.A. FLOORS 44 (SOUTH ONLY)

PANE EBN - 59'-0 3/4"

FABRICATION BY A.E.E. STEEL COMPANY

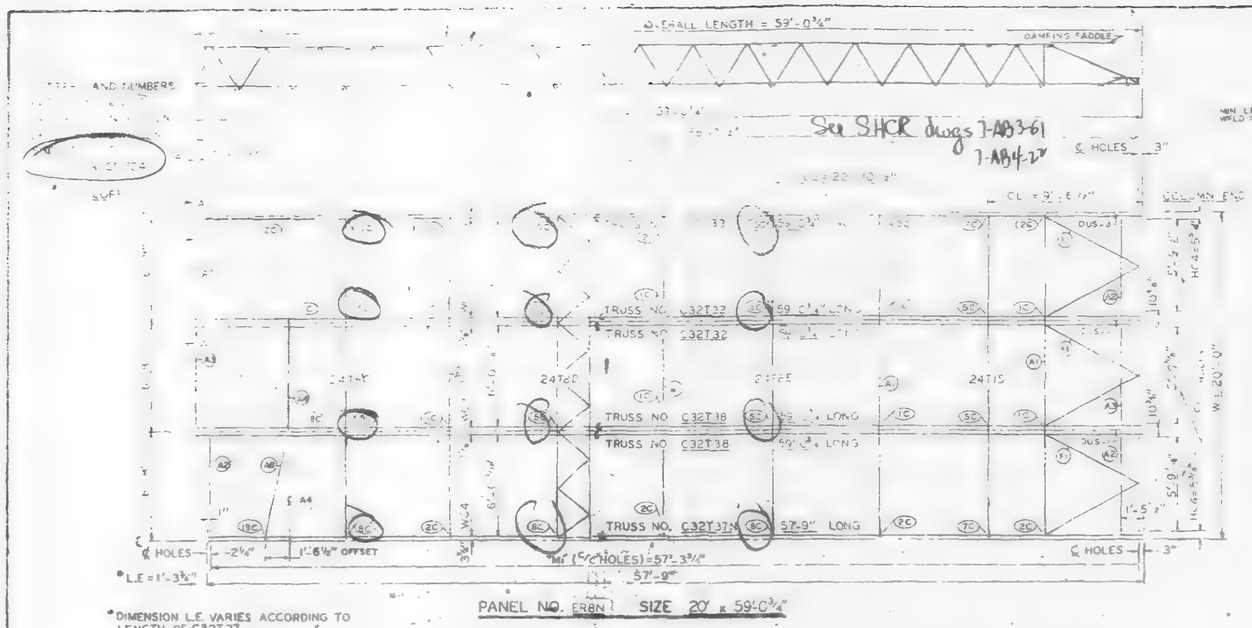
FABRICATED AT MADISON, ILLINOIS

APPROVED FOR FABRICATION	DATE	DRAWN BY	DATE
BY			APRIL 2, 1969
APPROVED FOR FABRICATION FOR FABRICATOR	DATE	CHECKED BY	DATE
BY			APRIL 2, 1969
DETAILED		FABR. DWG. NO.	CONT. NO.
		[illegible]	[illegible]

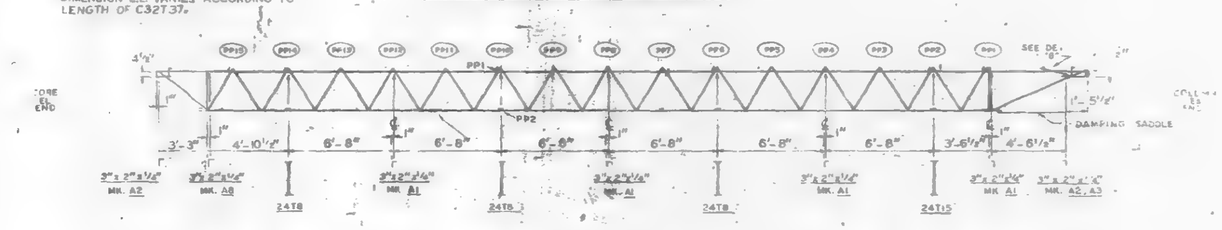
DESIGN DRAWING NO. 1-AB3-60

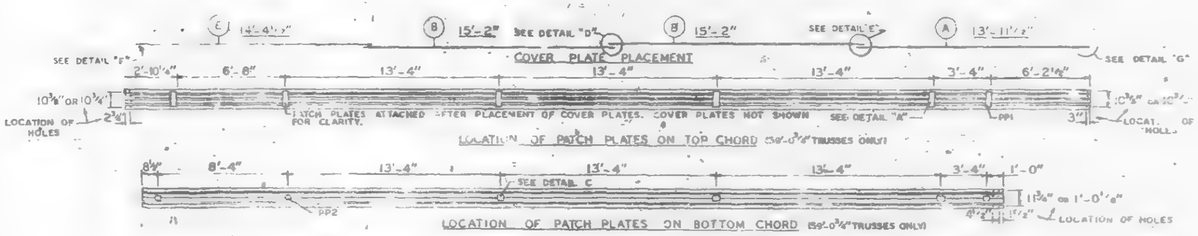
IN CHARGE OF PROD. DEV.

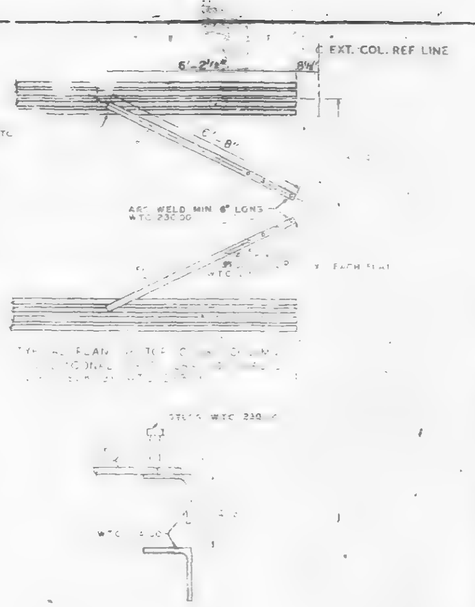
SHEET NO. FP EBN

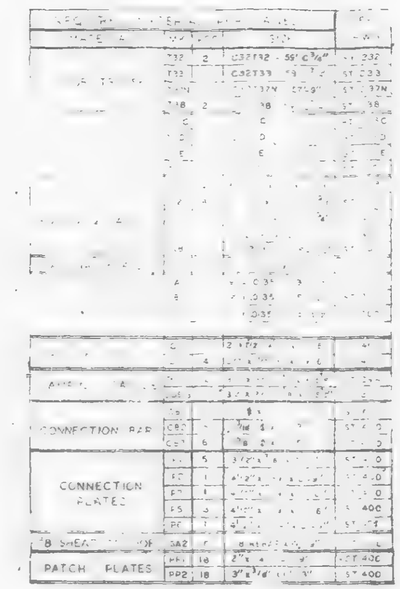


*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T37.



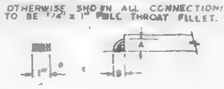


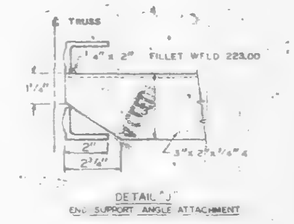




(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ⅛" x 1" FULL THROAT FILLET.





DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NO.	DATE	REVISION	BY

REF. DRWGS.

7-AB2-10	2-22-68
7-AB1-6	1-6-69
7-AB4-1	10-15-68
7-AB4-5 & 6	7-22-68
7-AB4-42	10-15-68
SA-x24	1-6-69
7-AB1-29 & 30	1-6-69
7-AB1-33 & 34	1-6-69
7-AB2-19	1-6-69

SKILLING-HELLE CHRISTIANSEN-ROBERTSON Steners 1 & Civil Engineers

9/23/69 SK

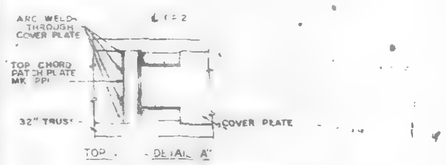
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BL A FLOORS 44 (SOUTH ONLY)

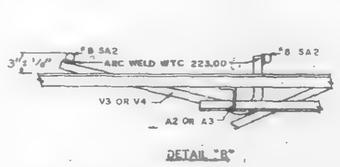
PANEL ERBN - 20' x 59'-0¾"

FABRICATION BY LACLEDE STEEL COMPANY

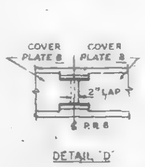
FABRICATED AT	DESIGN DRAWING NO.	PLATE
MADISON, ILLINOIS	7-AB3-61-C	
APPROVED FOR FABRICATION BY	DRAWN BY [illegible] DATE APRIL 2, 1969	
APPROVED FOR ERECTION BY	CHECKED BY T.M. CHURA DATE APRIL 2, 1969	IN CHARGE OF PROD. DES.
	CONT. NO.	FIELD ERECTION



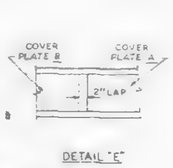
TOP DETAIL "A"



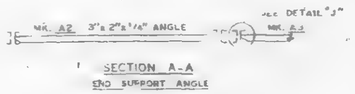
DETAIL "B"



DETAIL "D"

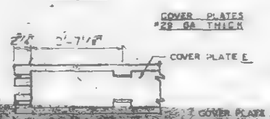


DETAIL "E"

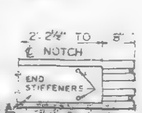


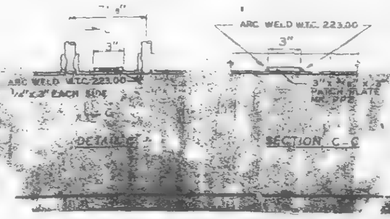
DETAIL "C" SECTION B-B

TOP VIEW - DETAIL "B"



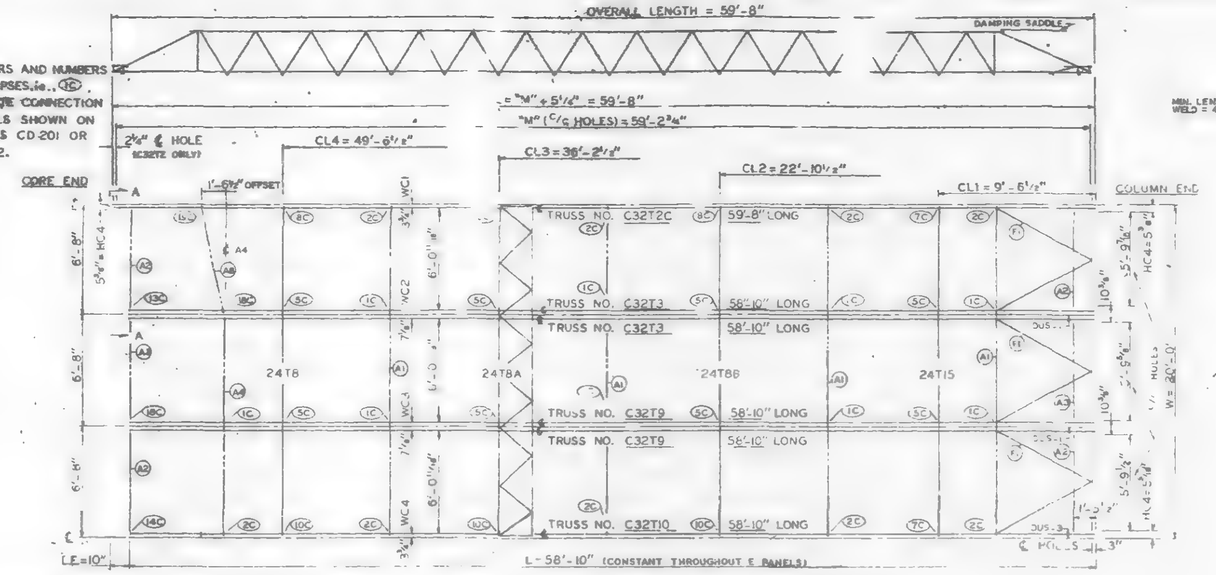
DETAIL "G"





DETAIL "F" SECTION C-C

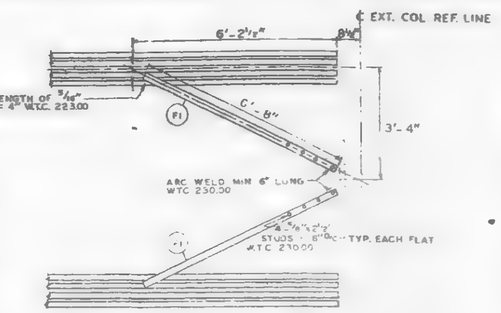
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.



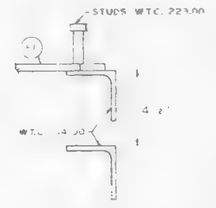
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. E1C SIZE 20' x 59'-8"

CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.



TYPICAL PLAN OF TOP CHORD & COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

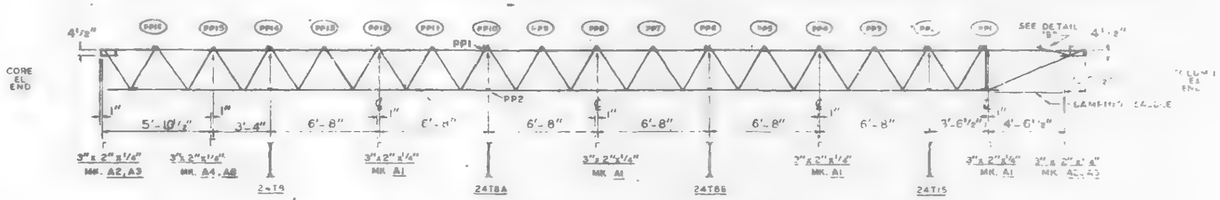


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T2C	1	C32T2C - 59'-8"	ST 202C
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST [illegible]
	T8A	1	24T8A - 19'-11"	[illegible]
	T8B	1	24T8B - 19'-11"	[illegible]
	T15	1	24T15 - 11"	ST [illegible]
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-1"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
	A4	1	3" x 2" x 1/4" x 13'-3"	ST 403
	A8	1	3" x 2" x 1/4" x 6'-8"	ST 403
DIAGONAL FLATS	F1	6	11 3/4" x 5" x 0'-11 5/8"	ST 402
COVER PLATES	A	3	9" x .0135" x 10'-11 1/2"	ST 303
	B	8	9" x .0135" x 15'-2"	ST 303
	E	3	9" x .0135" x 4'-4 1/2"	ST 303
ARC E STS	C1	2	2" x 1/2" x 4" x 0'-8"	ST 400
	C2	4	2" x 1/2" x 1/4" x 6"	ST 400
AMPING SADDLE	DLS-1	2	3 1/2" x 3 1/2" x 3/8" x 3'-6 5/8"	ST 298
	S-1	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 5/8"	ST 298
CONNECTION BAR	CB1	1	1" Ø x 1'-3"	ST 400
	CB2	6	3/4" Ø x 1'-3"	ST 400
	CB3	6	1 3/8" Ø x 1'-5"	ST 400
CONNECTION PLATES	F1	5	3'-7" x 3/8" x 1'-7"	ST 400
	F2	1	4'-2" x 3/4" x 2'-0"	ST 400
	F3	1	4'-2" x 3/4" x 1'-0"	ST 400
	F5	3	4'-2" x 1/4" x 1'-6"	ST 400
	P1	1	4'-2" x 1/2" x 0'-9"	ST 401
H SHEA[illegible]	SA2	6	3" x 2" x 1/4" x 0'-4"	ST 4[illegible]
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/16" x 0'-3"	ST 400

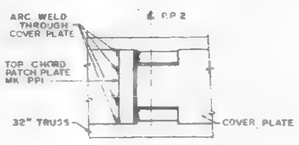
(1) ALL ARC WELD TO BE MADE WITH LOW HY. 10CEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FILLET THROAT FILLET.

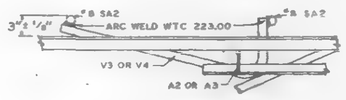


COVER PLATE PLACEMENT

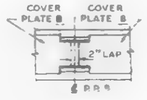
LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)



TOP VIEW - DETAIL "A"

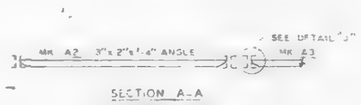


DETAIL "B"

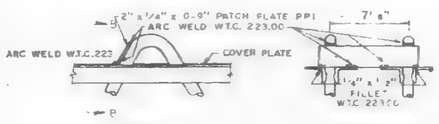


DETAIL "D"

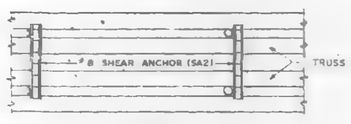
DETAIL "E"



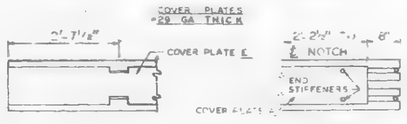
SECTION A-A
END SUPPORT ANGLE



DETAIL "A" SECTION B-B

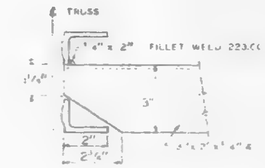


TOP VIEW - DETAIL "B"



DETAIL "F" DETAIL "J"

DETAIL "C" SECTION C-C



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NO.	DATE	REVISION	BY

REF. DRWGS.

7-AB2-3 & 11	7-22-68
7-AB3-11	7-22-68
7-AB4-1, 3, 11	1-3-68
7-AB4-15 & 18, 39	7-22-68
7-AB4-42	10-15-68
SA-124	10-11-68
7-AB1-3	7-22-68
7-AB1-6, 7 & 8	7-22-68

FLOOR PANEL DETAILS

FOR

WORLD TRADE CENTER - N.Y.C.

THE PORT OF NEW YORK AUTHORITY

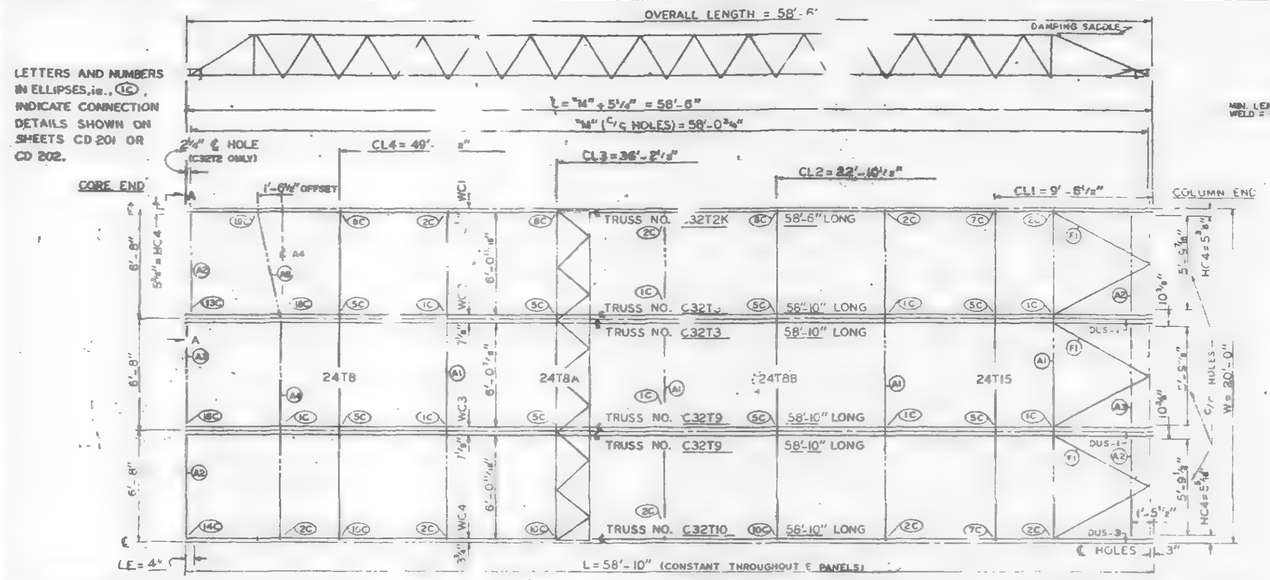
BLDG. A FLOORS 50-58, 60-66, 68-74, 79-91, 93-106 (S)

PANEL E1C - 20' x 59'-8"

FABRICATION BY LACLEDE STEEL COMPANY

DESIGN DRAWING NO.	7-AB2-11	7-22-68	
APPROVED FOR FABRICATION BY FABRICATOR & PLANT	DATE 11/15/68	DRAWN BY gdc DATE NOV. 1, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY E.M.CHUA DATE NOV. 4, 1968	IN CHARGE OF PROD. DEPT.
DETAILED BY A. CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP E1C

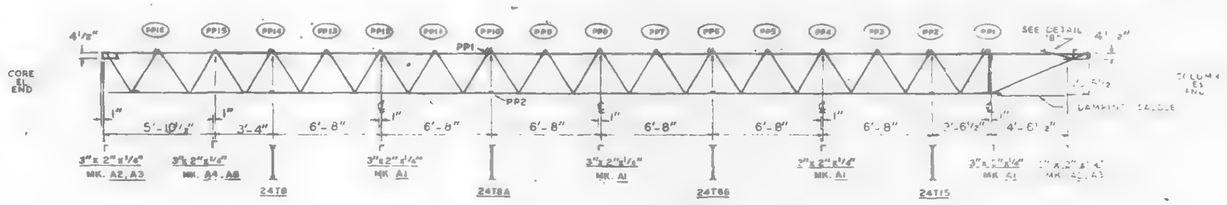
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.

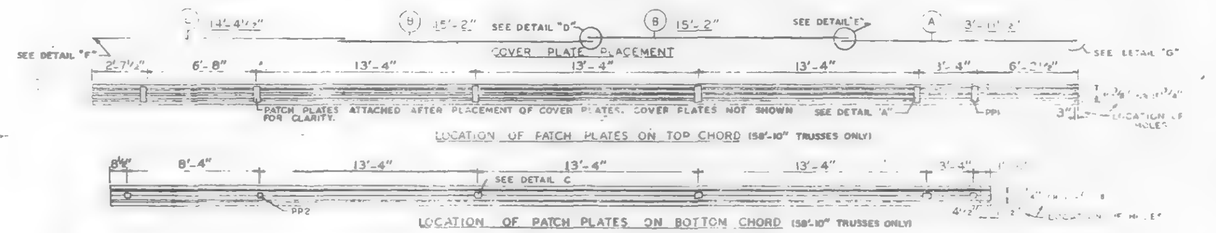


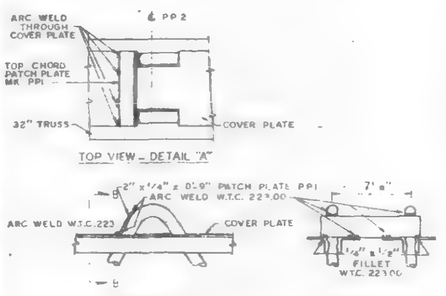
DIMENSION L.E. VARIES ACCORDINGLY TO LENGTH OF C32T2 TRUSS.

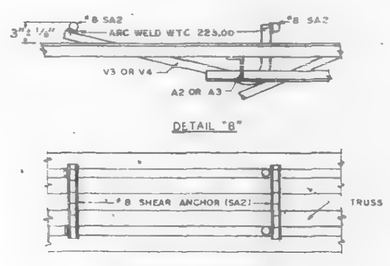
PANEL NO. E1K SIZE 20' x 58'-6"

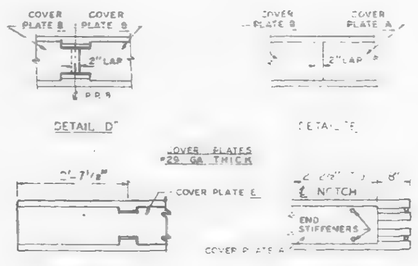
CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

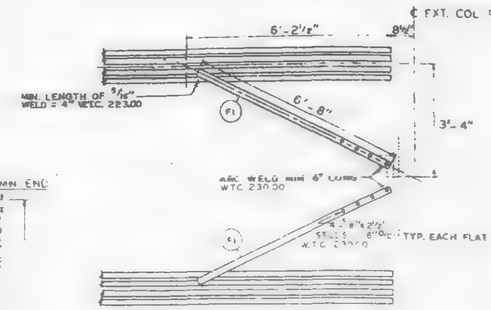




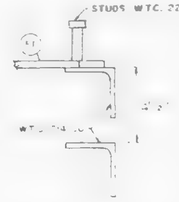








TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



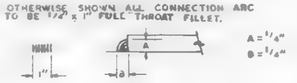
[illegible] ANGLE
END DIAGONAL TRUSS BRACES
4 1/2" ABOVE BOTTOM CHORD
CLIP FOR TRUSS BEARING.

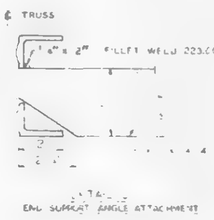
REQUIRED MATERIAL PER PANEL

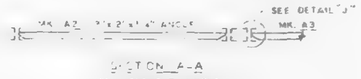
MATERIAL	MK.	PCS.	SIZE	SPEC. NO.
FLOOR TRUSSES	T2K	1	C32T2K - 58'-6"	ST 202K
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 18'-11"	ST 208
	T8A	1	24T8A - 11"	ST 208A
	T8B	1	24T8B - 9'-11"	ST 208B
	T15	1	24T15 - 19'-11"	ST [illegible]
3 1/2" x 2" x 1/4" ANGLE	A1	4	3 1/2" x 2" x 1/4" x 19'-10"	ST 403
	A2	4	3 1/2" x 2" x 1/4" x 5'-[illegible]	ST 40[illegible]
	A3	2	3 1/2" x 2" x 1/4" x [illegible]	ST [illegible]
	A4	1	[illegible] x 2 x [illegible]	ST 403
	A8	1	3 1/2" x 2" x [illegible]	ST [illegible]
DIAGONAL PLATES	[illegible]	[illegible]	[illegible] x 6'-9"	ST 402
COVER PLATES	A	3	[illegible] x .0135" x 13'-11 1/2"	ST 303
	B	5	18" x .0135" x 15'-2"	ST 303
	[illegible]	[illegible]	[illegible] x .0135" x 14'-4 1/2"	ST 303
END PLATES	C1	2	2" x 8 1/2" x 1'-0"	ST 400
	C2	4	2 1/2" x 10 1/2" x 1'-6"	ST 400
DAMPING SADDLE	DUS-1	2	3/16" x 3 5/16" x 3'-2 5/8"	ST 208
	DUS-3	1	3/16" x 5 1/2" x 3'-8 3/8"	ST 208
CONNECTION BAR	CB1	1	1" ℄ x 1'-3"	ST 400
	CB2	8	1/2" ℄ x 1'-3"	ST 400
	CB3	8	1 5/8" ℄ x 1'-5"	ST 400
CONNECTION PLATES	[illegible]	5	3'-[illegible] x 8" x 1'-1"	ST 400
	[illegible]	1	4'-2" x 1'-3" x 1'-[illegible]	ST 400
	[illegible]	[illegible]	4'-[illegible] x 1'-3" x 1'-[illegible]	ST 400
	PF5	3	4'-2" x 1'-1/4" x 1'-6"	ST 400
	PF	1	4'-2" x 1'-[illegible]" x 1'-9"	ST 401
"B" SHEAR ANCHOR	SA2	8	1" ⌀ HEADED x 0'-[illegible]"	ST 401
PATCH PLATES	PP1	18	2" x 4" x 0'-8"	ST 400
	PP2	18	3" x 3 1/4" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HY. KOBEN RODS IN THE E-7C SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.







NO	DATE	REVISION	BY

REF. DRWGS.

7-AB2-3 & 10	7-22-68
7-AB7-11	7-22-68
7-AB4-1, 3 & 11	1-3-68
7-AB4-15 & 16, 38	7-22-68
7-AB4-42	10-15-68
SA-124	10-11-68
7-AB1-3	7-22-68
7-AB1-6, 7 & 8	7-22-68

FLOOR FRAMING DETAILS

NORTH TOWER - NYC

THE PORT OF NEW YORK AUTHORITY

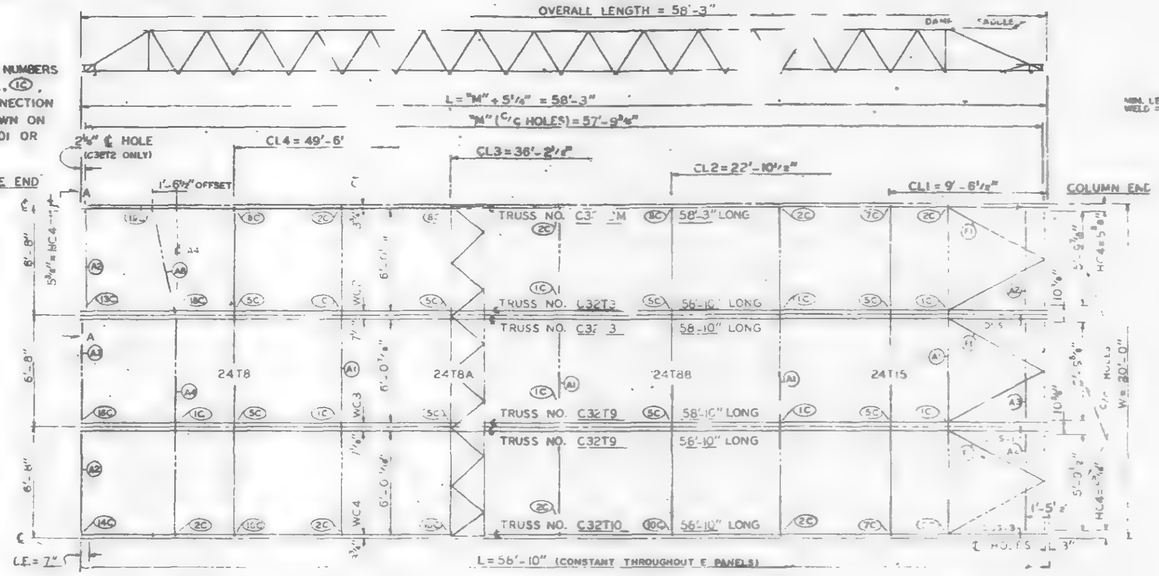
BLDG. A FLOORS 46 (N)

PANEL E1K - 20' x 58'-6"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7 AB3-11 9-22-68	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PONYA	DATE 11/15/68	DRAWN BY [illegible] DATE NOV 1 1968	
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE NOV. 4 1968	IN CHARGE OF PROD DEV
DETAILED BY R. CARL WEBER		FABRICATION CONT. NO WTC 221	SHEET NO. FP E1K

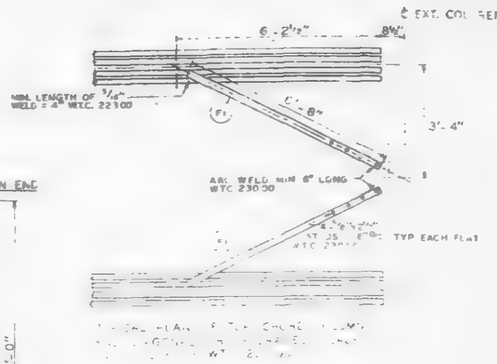
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.



DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. E1M SIZE 20' x 58'-3"

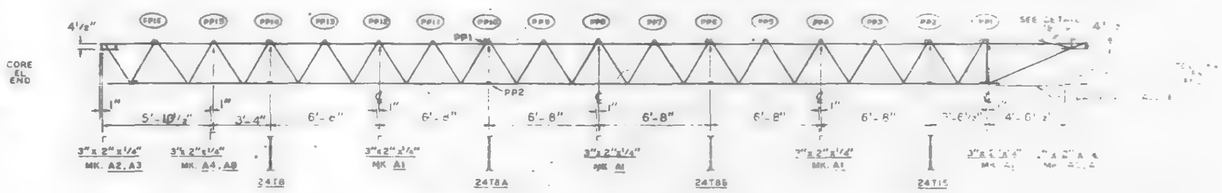
CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 205, CD 208 & CD 207 RESPECTIVELY.

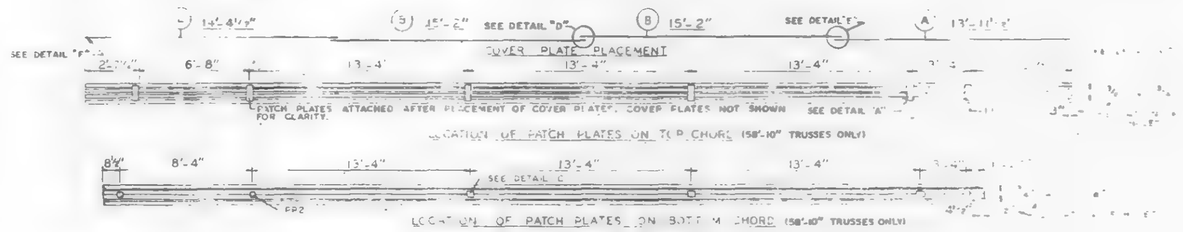


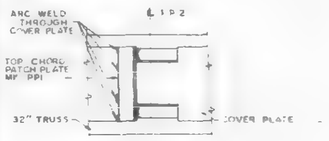
REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T2M	1	C32T2M - 58'-3"	ST 20, M
	T3	2	C32T3 - 58'-10"	ST 20J
	T9	2	C32T9 - 58'-10"	ST 20B
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T1S	1	24T1S - 19'-11"	ST 18
	T8A	1	24T8A - 19'-11"	ST 208A
	T8B	1	24T8B - 19'	ST 208B
	T1C	1	24T1C - 1"	ST 21S
3" x 2" x 1/4" ANGLE	A	1	3" x 2" x [illegible]	ST 4C
	A2	4	3" x 2" x 5 1/16"	ST 4
	A3	4	3" x 2" x 5 1/16"	4-3
	[illegible]	[illegible]	x2 x [illegible]	4-4C
	A8	1	3" x 2" x 6 1/16"	ST 4C
[illegible]	[illegible]	[illegible]	2" x [illegible]	ST 40I
	A	1	3" x 1/2" x 5'-11"	ST 303
	B	1	3" x 1/2" x 5'-2"	ST 303
	[illegible]	[illegible]	3" x 0.35 x 2 4/16"	ST 303
[illegible]	C	2	3" x 2" x 3" x 1/4" x 0'-8"	ST 401
[illegible]	[illegible]	4	3" x 1/2" x 1/4" x 6"	ST 401
A[illegible]	[illegible]	2	3" x 1/2" x 3" x 3 1/4"	ST 298
	[illegible]	[illegible]	3" x 1/2" x 3" x 3 1/4"	ST 298
[illegible]	[illegible]	1	8" x [illegible]	ST 40C
CONNECTION PAR	CB2	5	3/16" @ x [illegible]"	ST 40C
	CB1	6	1/8" @ x [illegible]"	ST 40C
CONNECTION PLATES	[illegible]	5	3" x 1/2" x 8" x 0'-9"	ST 40C
	[illegible]	[illegible]	4" x [illegible]	ST 40C
	[illegible]	[illegible]	4" x [illegible]	ST 40C
	[illegible]	[illegible]	4" x [illegible]	ST 40C
	[illegible]	[illegible]	4" x [illegible]	ST 40I
BASE [illegible] OF [illegible]	BA2	6	[illegible] x 0'-9"	ST 4[illegible]
PATCH PLATES	PP1	10	2" x 6" x 0'-9"	ST 40C
	PP2	18	3" x 3/8" x 0'-9"	ST 40C

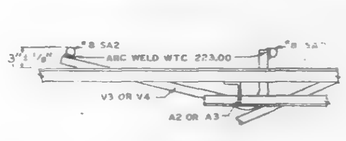
(1) ALL ARC WELD TO BE MADE WITH LOW HY. (E70CR) RODS IN THE E-70 SERIES OR EQUAL.

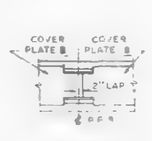
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

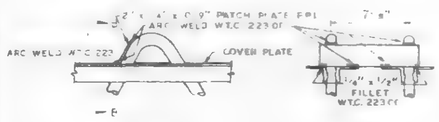


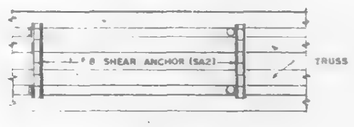












NO.	DATE	REVISION	BY
		[illegible]	7-22-68
		[illegible]	7-22-68
		[illegible] 3.31	1-3-68
		[illegible] & 16.39	7-22-68
		[illegible] .62	10-15-68
		[illegible] .29	10-11-68
		[illegible] J	7-62-68
		[illegible] & 8	7-62-68

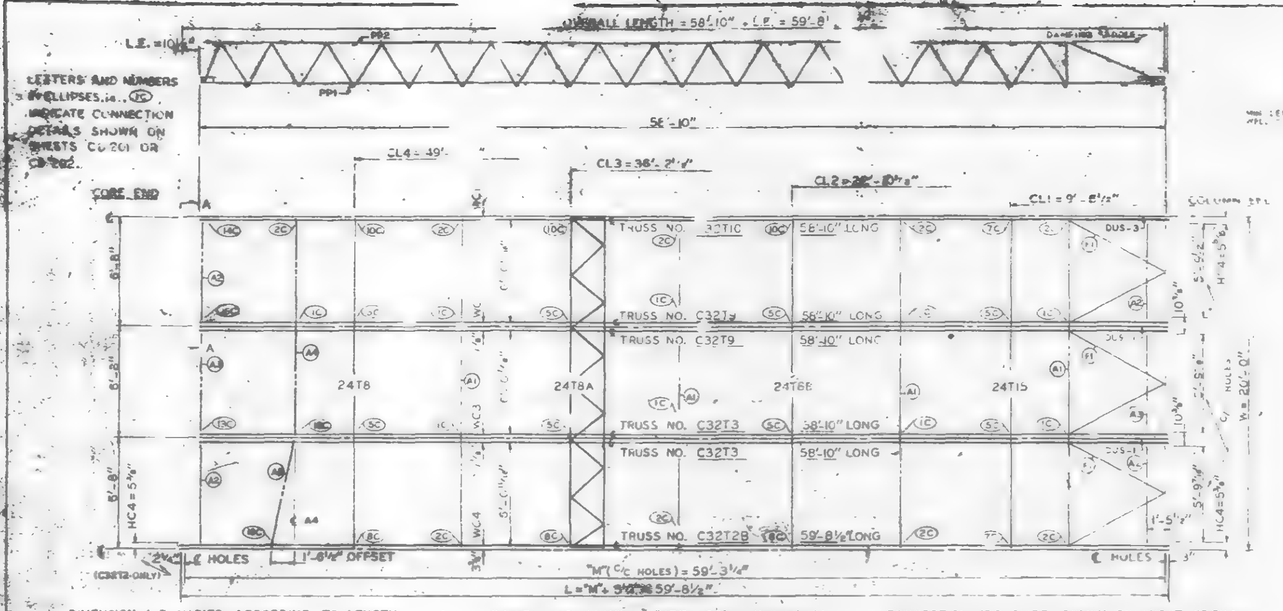
DES 72-73 (N)

PANEL E1M - 20' x 58'-3"

DATE NOV. 4 1968

FABRICATION CONT NO 221

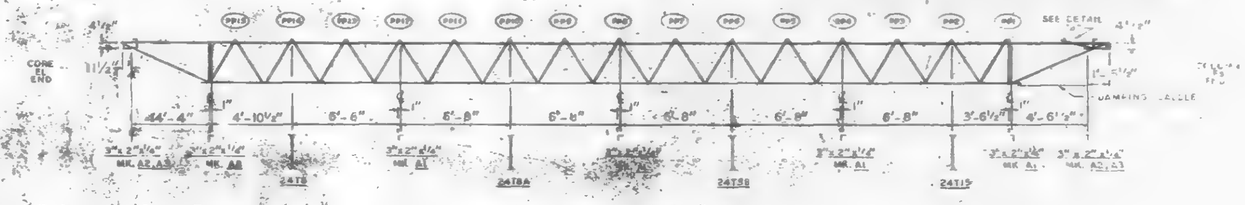
SHEET NO FP E1M

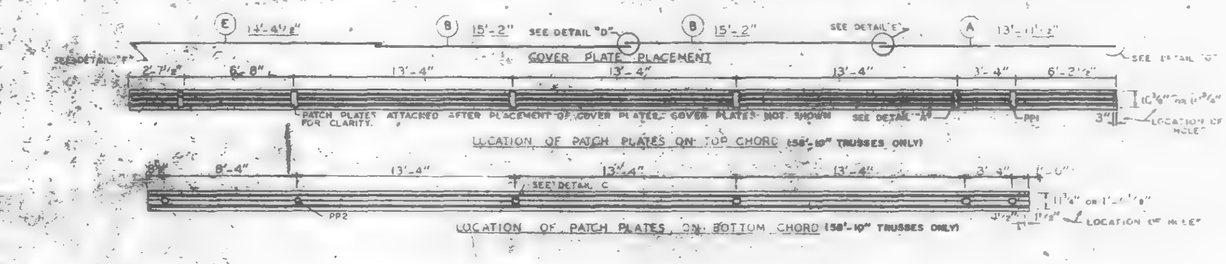


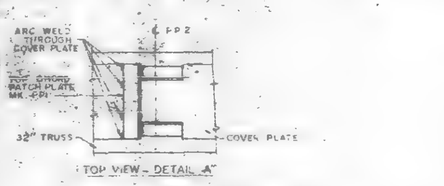
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

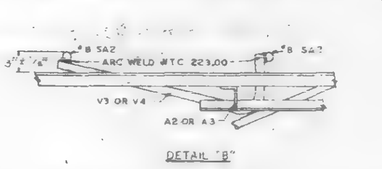
PANEL NO. ERIB SIZE 20' x 59'-8½"

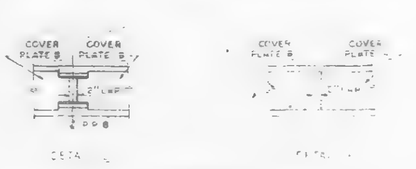
CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

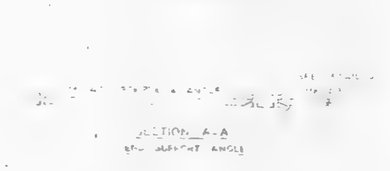


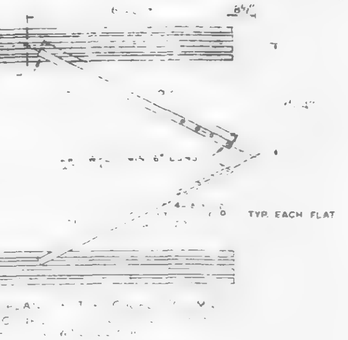












CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-½". ABOVE COLUMN CLIPS FOR TRUSS BEARING.

	MK	SIZE	
	12B	C32T2B - 59'-8½"	ST 202B
	13	32T3 - 58'-10"	ST 208
	14	C32T9 - 58'-10"	ST 209
	16	C32T10 - 58'-10"	ST 210
	18	24T8 - 49'-11"	ST 208
	18A	24T8A - 11"	ST 208A
	18B	24T8B - 9'-11"	ST 208B
			15
			13
	A2		ST 401
3½ x 2½ x ¼" ANGLE	A3		ST 402
	A4	3½ x 2½ x ¼ x 43'-3"	ST 403
	A5	3½ x 2½ x ¼ x 61'-8½"	ST 405
	F1	11"	ST 402
			ST 303
			ST 303
ANGLE CLIPS	C1	20	ST 401
	C2	4	ST 402
		2	ST 208
			ST 209
			ST 400
CONNECTION PLATE	CP2		ST 400
		6	ST 400
	P1	5	ST 400
CONNECTION PLATES	P2	1	ST 400
	P3	1	ST 400
	P5	3	ST 400
	P6	1	ST 401
8" SHEAR ANCHOR	SA2	6	ST 400
PATCH PLATES	PP1	16	ST 400
	PP2	18	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HY. IRON NODS IN THE E-7C SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ⅛" x 1" FULL THROAT FILLET.

NO	DATE	REVISION	BY

PLT. LAYOUT	7-B&D-3&10 7-62-68
	7-A&D-12 10-15-68
	7-AB4-1,3,11 1-3-68
	7-AB4-15&18 7-62-68
	7-AB4-42 10-15-68
	SA-124 10-1-68
	7-AD-3 7-62-68
	7-A-67-68 7-62-68

SECTION A-A
END SUPPORT ANGLE

DESIGN DETAILS

84-91, 93-106(N)

MARK ERIB - 20' - 59'-8½"

[illegible] STEEL COMPANY

DESIGN DRAWING NO.	7-B&D-12 10-15-68		
DETAILED	DATE 11/20/68	CHECKED	DATE NOV 4 1968
SHOP FABRICATION	DATE NOV 5, 1968	FABRICATION CONT. NO.	SHEET NO.
DETAILER CARL WEBER		221	FP ERIB

LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.

OVERALL LENGTH = 58'-10" ± L.E. = 59'-8"

L.E. = 10"

58'-10"

CL4

CL3 = 36'-2½"

2 = 22'-10⅛"

CL1 = 9'-6⅛"

CARE END

TRUSS NO. C32T10 58'-10" LONG

TRUSS NO. C32T9 58'-10" LONG

TRUSS NO. C32T9 58'-10" LONG

TRUSS NO. C32T3 58'-10" LONG

TRUSS NO. C32T3 58'-10" LONG

TRUSS NO. C32T2C 59'-8" LONG

24T8 24T8A 24T8B 24T15

HC2 HC3 HC4

12½" ℄ HOLES 1'-6¼" OFFSET (C32T2 ONLY)

℄ HOLES 3"

"M" (℄ HOLES) = 59'-2¾"

L = "M" + 5¼" = 59'-8"

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIC SIZE = 20' x 59'-8"

CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

MIN LENGTH OF ¾" WELD = 3" W.T.C. 22.70

TYP EACH FLAT

STUDS W.T.C. 223.00

W.T.C. 214.00

4' 2"

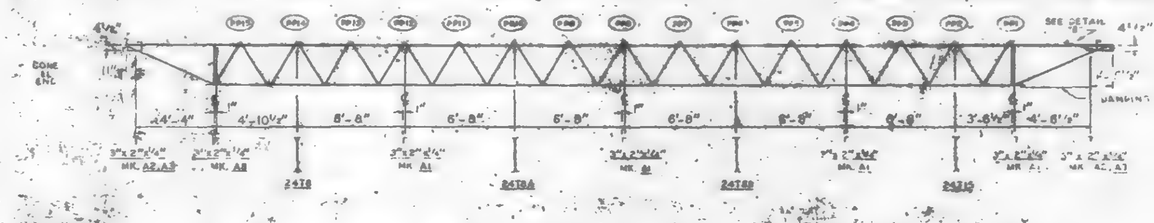
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

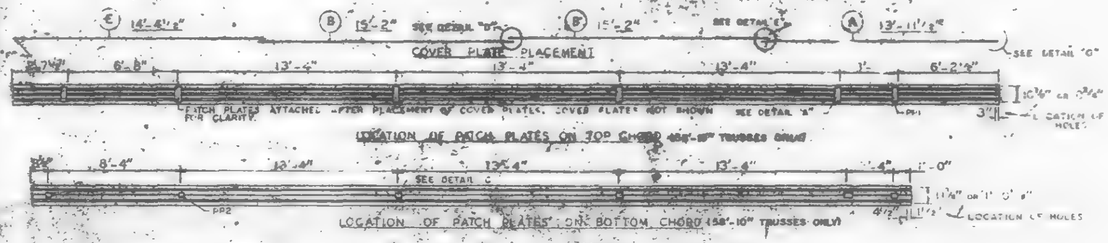
MARK	NO.	SIZE	
	1C	C32T1C - 59'-8"	ST 202C
	2	C32T - 58'-10"	ST 203
	1D	C32T - 58'-10"	ST 209
	1E	C32T - 58'-10"	ST 210
	1H	4T6 - 40"	ST 208
	1BA	4T8A - 0"	ST 208A
	1	24TM - 9'-11"	ST 208B
	1TC	- 14'-11"	ST 211C
	A	4" x 10'-0"	T 401
	G2	4" x 6" x 5"	ST 401
3½" x 2½" x ¼" ANGLE	A4	3½" x 2" x 0'-3"	ST 403
	A8	3½" x 2½" x 0'-8½"	ST 405
	F1	1'-2" x 5⅛" x 0'-8"	ST 402
	A	1'-0" x 0'-5" x ¼"	ST 703
	B	1'-0" x 0'-5" x ¾"	ST 707
	3	4" x 0'-3½" x 1'-4"	ST 303
ANGLE CLIPS	C1	3½" x 2½" x ¼" x 0'-8"	ST 404
	G2	4" x 3½" x ¼" x 0'-8"	ST 406
ANCHOR	2	8" x 3½" x ⅝" x 0'-3"	ST 288
	S3	3" x 3" x ⅝" x 0'-3"	ST 284
CONNECTION PLATE	1	¾" x 0'-3"	ST 400
	1BA	¾" x 1'-3"	ST 420
	6	¾" x 1'-5"	ST 422
CONNECTION PLATE	P1	3' 2" x 3⅛" x 6½"	ST 402
	P2	4' 2" x .38" x 0'-9"	ST 403
	P3	4' 2" x .38" x 0'-7"	ST 401
	P5	3	ST 400
	P8	4' 2" x .38" x 0'-9"	ST 401
⅞ SHEAR ANCHOR	A2	8 HEADED x 0'-3"	ST 400
PATCH PLATES	PP1	2'-7" x 1'-4" x 0'-9"	ST 411
	PP2	3" x 3'-6" x 0'-3"	ST 410

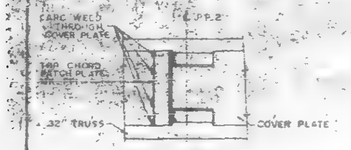
(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-7C SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

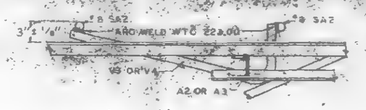
A = ¼"
B = ¼"



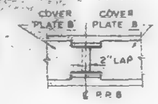




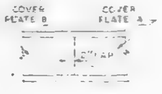
TOP VIEW - DETAIL "A"



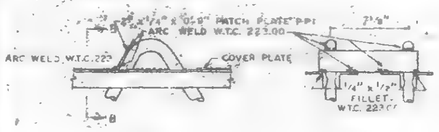
DETAIL "B"



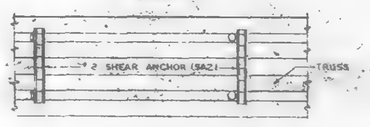
DETAIL "D"



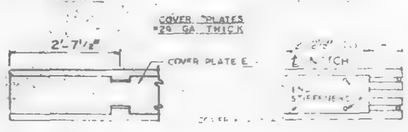
DETAIL "E"



DETAIL "A" SECTION B-B

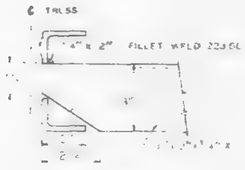


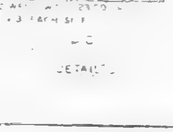
TOP VIEW - DETAIL "B"



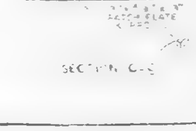
DETAIL "F" ETA

FIELD PUNCH SINGLE PLATE SHEAR END STIFFENERS W.T.C. 22.00





DETAIL "C"



SECTION C-C

NO.	DATE	REVISION

M.F. DRWGS.

7-A82-36 10	7-62-68
7-A87-12	10-15-68
7-A84-1 3	1-3 -68
7-A84, 4 A 6	7-62-68
7-A84, 4 C	10-15-68
7-A81-24	10-1 -68
7-A81-3	7-62-68
7-A81-6, 7 & 8	7-22-68

FLOOR PANEL DETAILS

MFR

MULTI-FAMILY LENGTH = N.Y.C.

THE NEW YORK CITY HOUSING AUTHORITY

BLDGS. FLOOR 50-58, 60-66, 68-74, 80-91, 93-106 (S)

PANEL ERIC SIZE = 59'-8"

ACME STEEL COMPANY

DATE	11/20/68	DRAWING NO.	7-A82-12 10 15-68
		NOV 4 1968	
		NOV 5	
		FABRICATION CONTRACT NO.	221

PLATE FP ERIC

LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.

OVERALL LENGTH = 58'-10" + L.E. = 59'-2"

L.E. = 4"

58'-10"

CORE END

TRUSS NO. C32T10 58'-10" LONG

TRUSS NO. C32T9 58'-10" LONG

TRUSS NO. C32T8 58'-10" LONG

TRUSS NO. C32T3 58'-10" LONG

TRUSS NO. C32T2 59'-2" LONG

24T8 24T8A 24T8B 24T15

2¼" (C32T2 ONLY)

℄ HOLES 1'-6¼" OFFSET

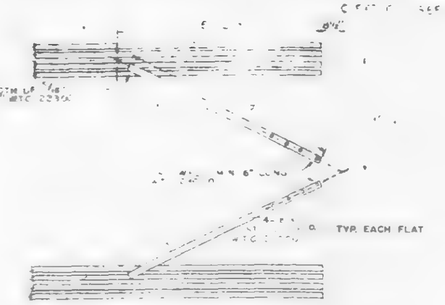
"M" (℄ HOLES) = 58'-8¾"

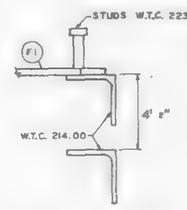
L = "M" + 5½" = 59'-2"

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIF SIZE 20' x 59'-2"

CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.



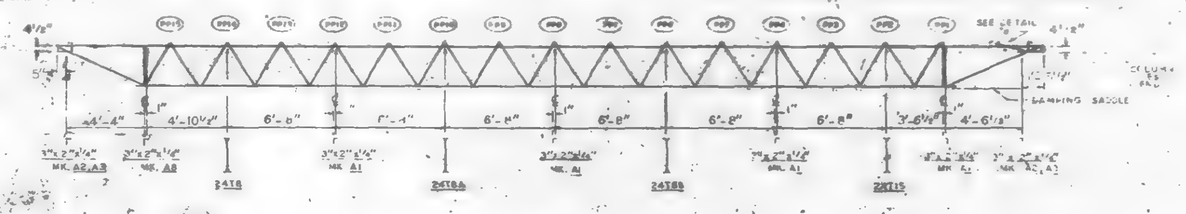


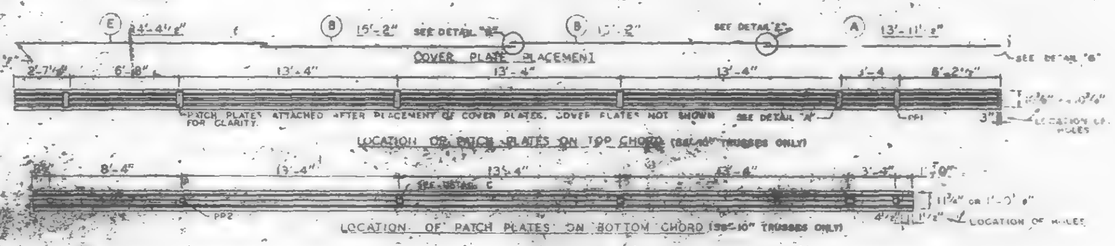
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

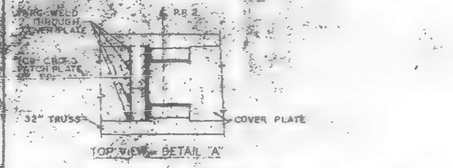
			SIZE	WT.
			24T8 - 59'-2"	ST 202F
			C32T3 58'-10"	ST 203
			C32T2 58'-10"	ST 208
			C32T8 58'-10"	ST 210
			24T8	ST 209
			24T8A 19'-11"	ST 208A
			24T 19'-11"	ST 208B
			24T15 19'-11"	ST 215
3"x 2"x¼" ANGLE			3"x 2"x ¼" x 19'-11"	T 403
			3"x 2"x ¼" x 6'-8"	ST 403
			3"x 2"x ¼" x 4'-4"	ST 403
			3"x 2"x ¼" x 13'-3"	ST 403
			3"x 2"x ¼" x 6'-8½"	ST 405
			8" x 5⅛" x 6'-8"	ST 402
			6" x .135" x 1'-11½"	ST 303
			6" x .135" x 15'-3"	ST 303
			6" x .135" x 14'-4"	ST 303
ANGLE CLIPS	C1	20	2"x4"x¼" x 0'-6"	ST 401
	C2	4	2"x4"x¼" x 0'-8"	ST 401
		2	3"x4"x⅜" x 3'-1"	ST 298
		3	3"x4"x⅜" x 3'-1"	ST 298
	C5	1	4"x4"x½" x 0'-8"	ST 400
CONNECTION PAR	CB2	5	½" x 1'-3"	ST 400
	C6	6	½" x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3'-2" x ⅜" x 6'-2"	ST 400
	P2	1	4'-2" x .30" x 0'-8"	ST 400
	P3	1	4'-2" x .30" x 1'-0"	ST 400
	P5	3	4'-2" x ¼" x 1'-6"	ST 400
	P6	1	4'-2" x .30" x 0'-9"	ST 401
¾ SHEAR ANCHOR	A2	6	¾ HEADED x 0'-4"	ST 400
PATCH PLATES	PP1	18	2"x ¼" x 0'-9"	ST 400
	PP2	18	3"x ⅜" x 0'-1"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW ALLOY ROD IN THE E-70 SERIES OR EQUAL.

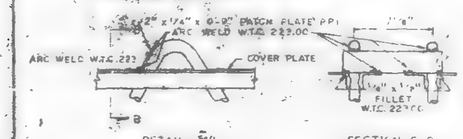
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" FULL THROAT FILLET.



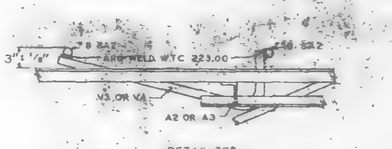




TOP VIEW - DETAIL "A"

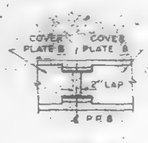


DETAIL "A" SECTION B-B

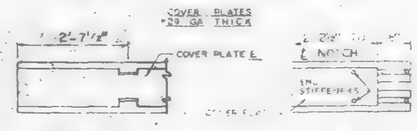


DETAIL "B"

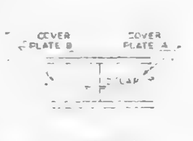
TOP VIEW - DETAIL "B"



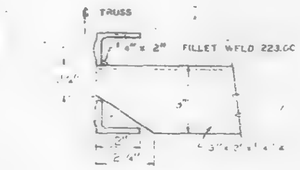
DETAIL "D"



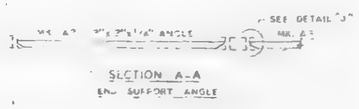
DETAIL "E" DETAIL "F"



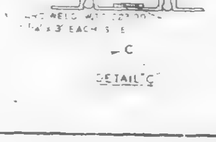
DETAIL "C"



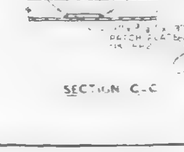
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE



DETAIL "C"



SECTION C-C

NO.	DATE	REVISION

REF. DRWGS.

7-A62-7 & 10	7-22-68
7-A63-12	10-15-68
7-A64-1, 3, 11	1-3-68
7-A64-15 & 16	7-22-68
7-A64-42	10-15-68
SA-124	10-11-68
[illegible] 3	7-22-68
[illegible] 6, 7 & 8	7-22-68

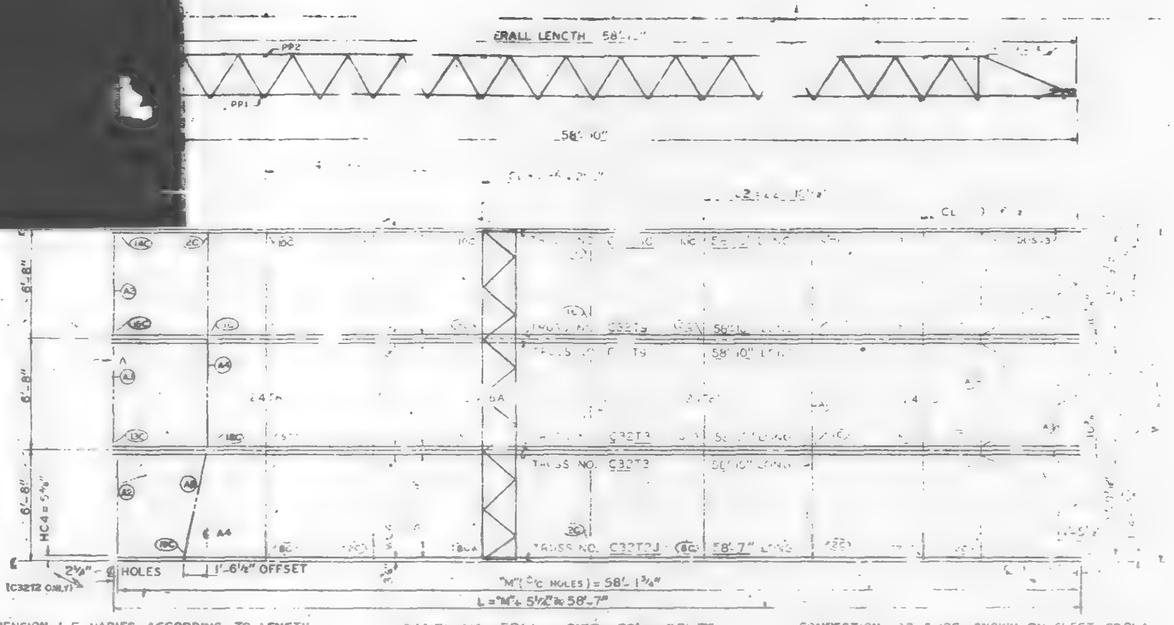
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

CONTRACT NO. 47-48, 70-71 (N)

PANEL ERIF - SIZE 59'-2"

FABRICATION BY LACLEDE STEEL COMPANY

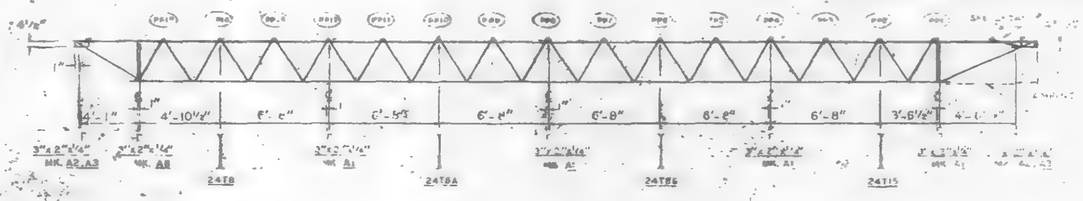
DESIGNED BY NOIS
DRAWN BY [illegible]
CHECKED BY [illegible]
APPROVED BY [illegible]
DATE 11/20/68
DESIGN DRAWING NO. 7 A63-12 10 5 68
DRAWN BY JAG
DATE NOV 4, 1968
CHECKED BY [illegible]
DATE NOV 5, 1968
FABRICATION ECN NO.
W.T.C. 221
SHEET NO. FP ERIF

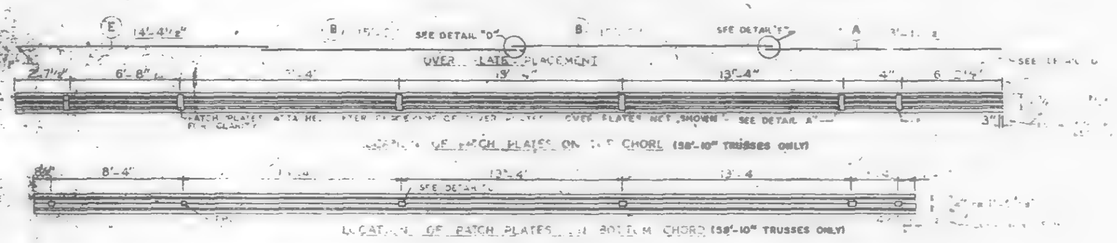


DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIJ SIZE 20' x 58'-7"

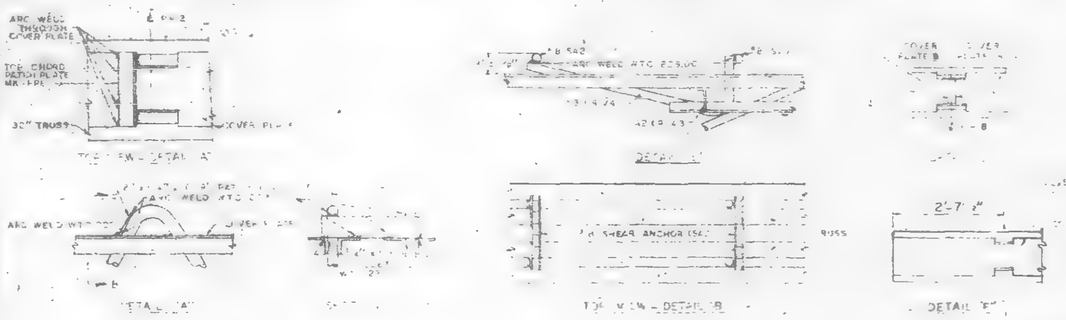
CONNECTION 9C & 19C SHOWN ON SHEET CD204.
SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

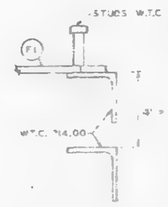




LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)

LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)





CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

ANGLE CLIPS	A2	6	8 NF×4.5 x 0'-9"	ST 400
	PL1	16	2" x 1'-4" x 0'-9"	ST 44C
PATCH PLATES	PL2	18	3" x 1'-8" x 0'-7"	ST 41C

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-7C SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTING ARC WELDS TO BE ⅛" x 1" FULL THROAT FILLET.

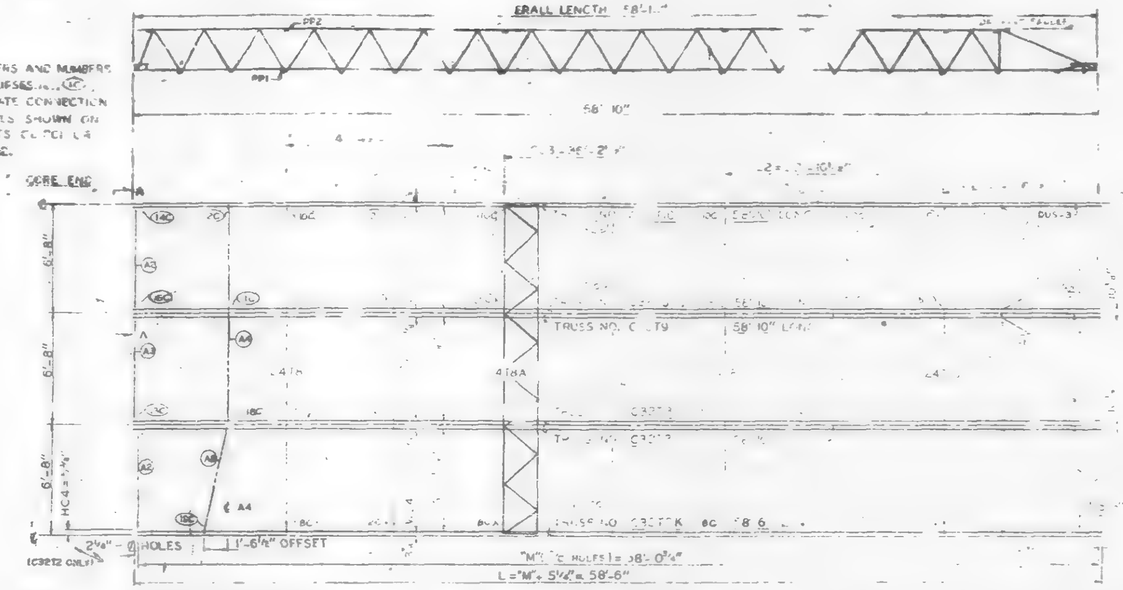
NO	DATE	REVISION	BY

40 (N)

ERIJ 8 7

11/20/68

LETTERS AND NUMBERS IN ELLIPSES (A1, A2, etc.) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 & CD 202.



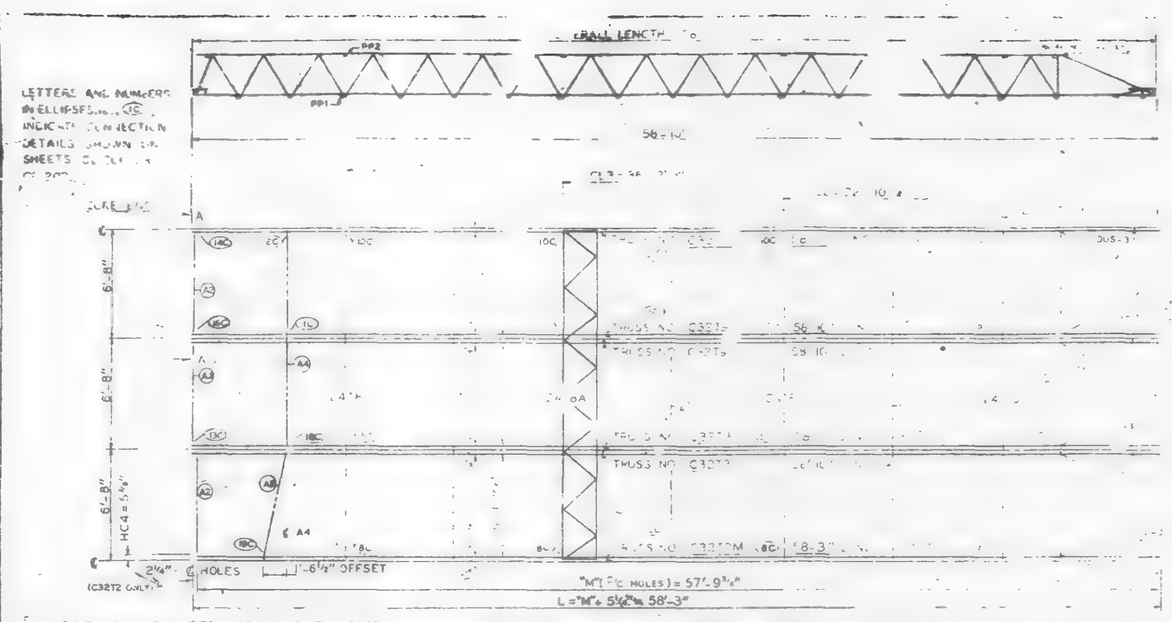
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIK SIZE 20' x 8'-6"

CONNECTION D & DC SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS (PC, PCC, & INT. PC) ARE ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

		8'-6"		
		58' 11"		ST 203
		58' 10"		ST 209
		58'-10"		210
				208
				ST 208A
				ST 208B
				ST
				ST 403
				ST 405
				ST


PANEL LENGTH
PP2
PP1
56'-10"
A
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
A15
A16
A17
A18
A19
A20
A21
A22
A23
A24
A25
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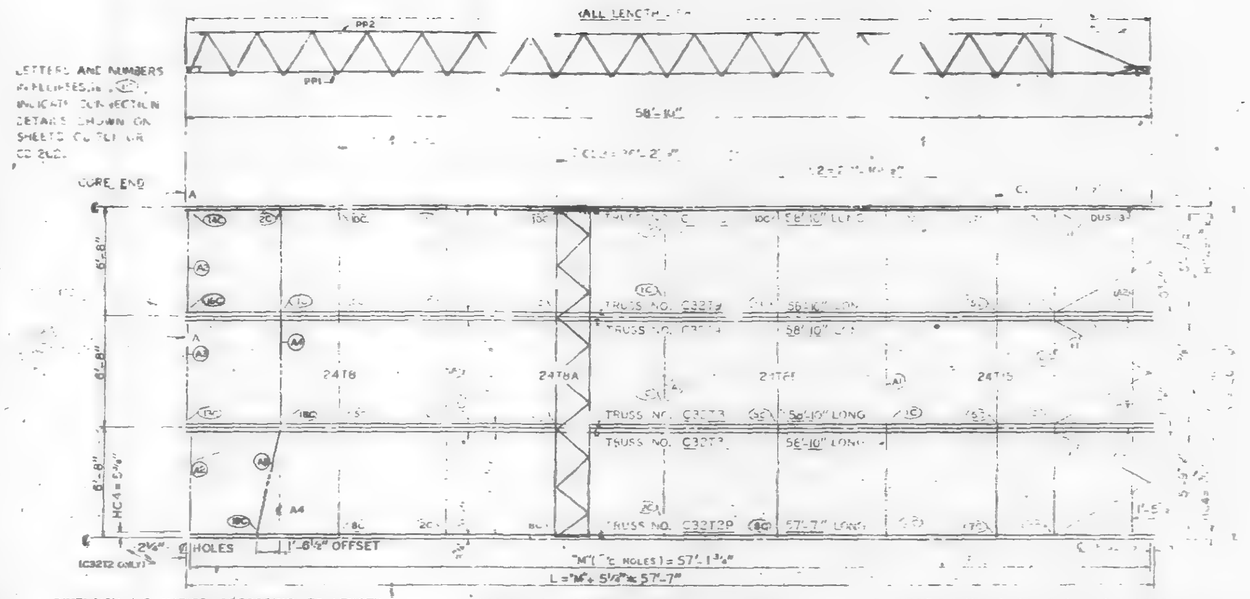
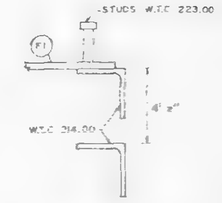
A38
A39
A40



DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIP SIZE 20' x 57'-7"

CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207, RESPECTIVELY.



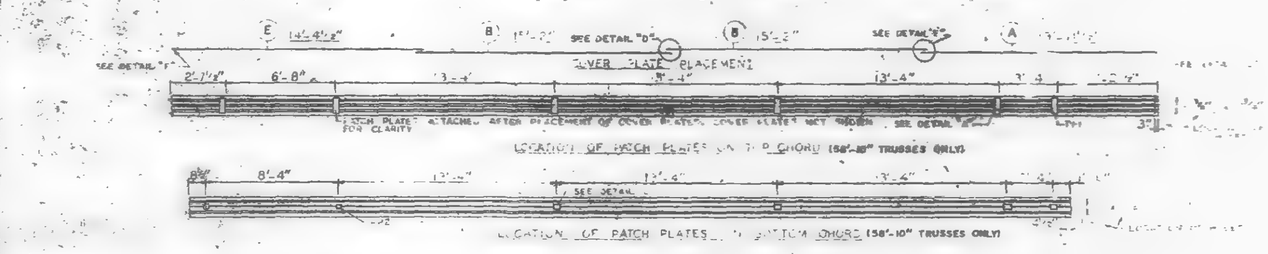
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-6" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

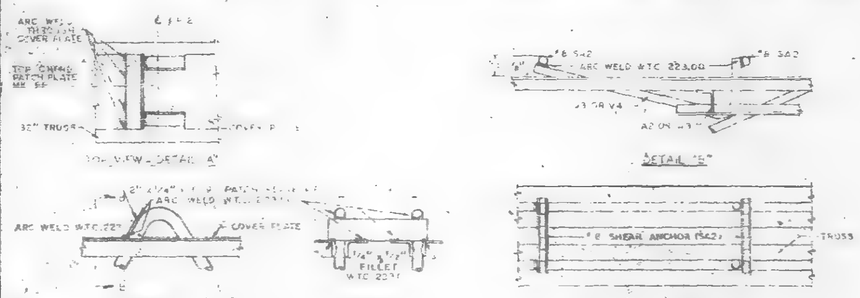
	P1	5	3' 6" x 3" x 8' 2"	ST 402
	P2	1	6'-7" x .30" x 0'-8"	
	P3	1	2' - .30" x 1' 0"	
	P5	3	2' - .36" x 1' 6"	400
	P6	1	4' 2" x .36" x 0' 9"	ST 401
SHEAR ANCHOR	SA2	6	8" x 8" x 0'-9"	ST 400
PATCH PLATES	PL1	16	5" x 5" x 0'-9"	ST 406
	PL2	18	5" x 5" x 0'-9"	ST 406

(1) ALL FIELD WELD TO BE MADE WITH LOW HY. 80 OPEN NODE IN THE E-7C SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

NO.	DATE	REVISION





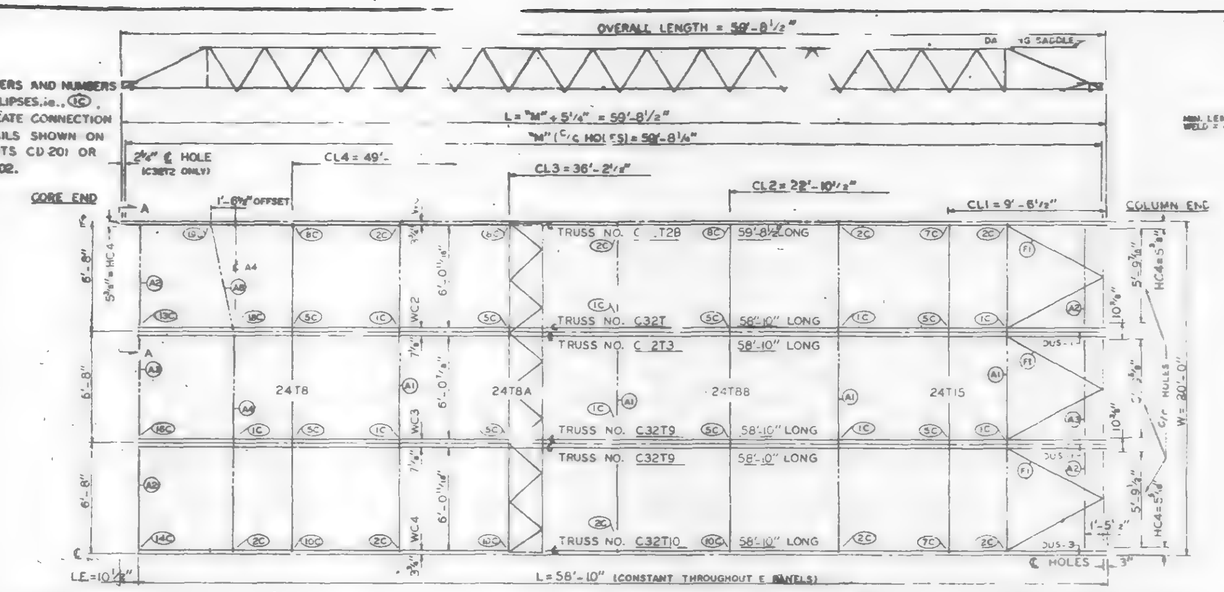
NO.	DATE	REVISION

74 (N)

ERIP 77

James White 11/20/68

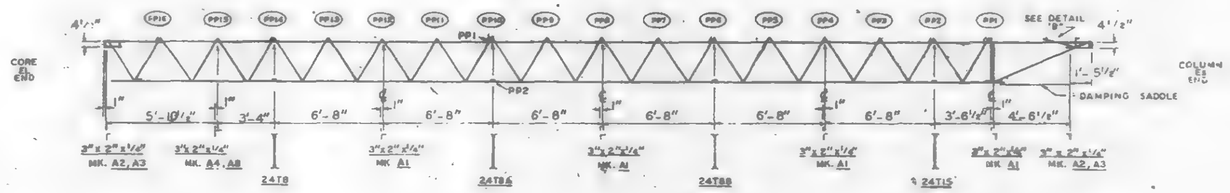
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.

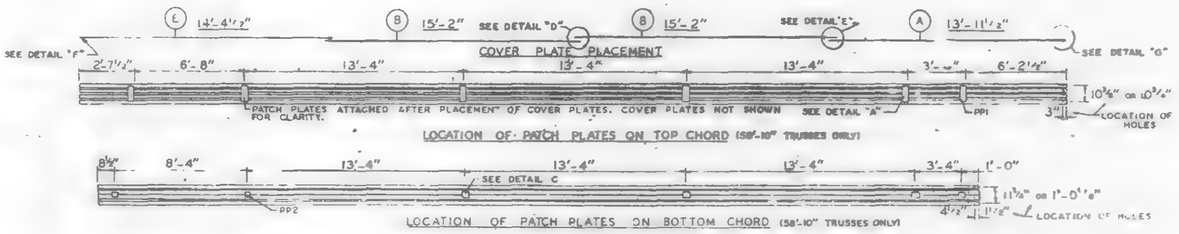


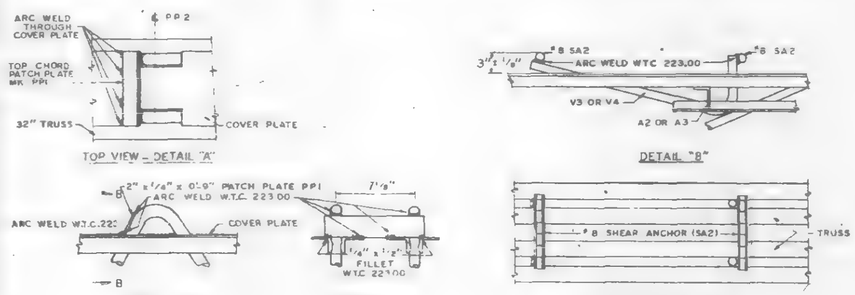
DIMENSION L.E. VARIES HORIZONTALLY TO LENGTH OF C32T2 TRUSS.

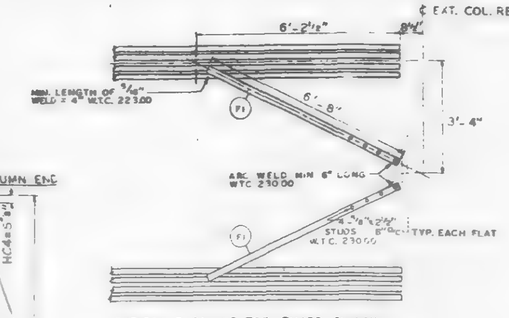
PANEL NO. E1B SIZE 20' x 59'-8 1/2"

CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

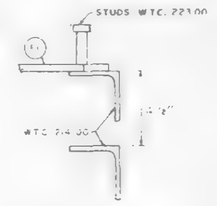




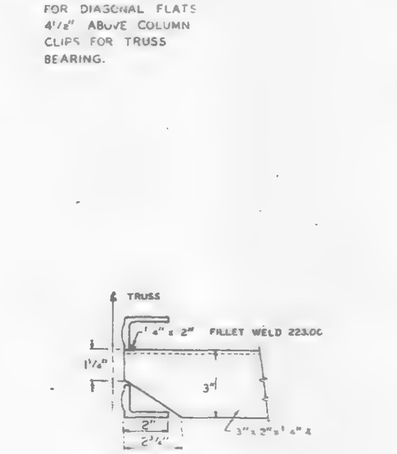


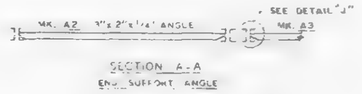


TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

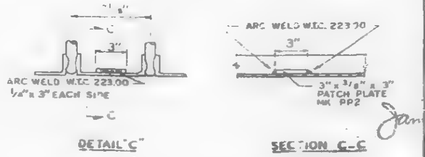


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.





SECTION A-A
END SUPPORT ANGLE



REQUIRED MATERIAL PER PANEL

MATERIAL	MK	PCS	SIZE	TO
FLOOR TRUSSES	T2B	1	C32T2B - 59'-8 1/2"	ST 208
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 10'-11"	ST 208
	T8A	1	24T8A - 10'-11"	ST 206A
	T8B	1	24T8B - 11"	ST 206B
	T1S	1	24T1S - 11"	ST 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 10'-11"	ST 3
	A2	4	3" x 2" x 1/4" x 5'-1 1/4"	ST 3
	A3	2	3" x 2" x 1/4" x 5'-1 3/4"	ST 403
	A4	1	3" x 2" x 1/4" x 6'-3 1/2"	ST 405
	A8	1	3" x 2" x 1/4" x 6'-3 1/2"	ST 405
DIAGONAL FLATS	F1	8	2" x 5/16 x 6'-9"	ST 402
COVER PLATES	A	3	0.135" x 19'-11 1/2"	ST 303
	B	6	0.135" x 19'-2"	ST 303
	E	1	0.135" x 16'-6 1/2"	ST 303
ANGLE CLIP	C1	20	2" x 5" x 1/4" x 0'-8"	ST 400
	C2	4	2" x 1 1/2" x 1/4" x 6"	ST 400
DAMPING SADDLE	DUS-2	2	3 1/2" x 3 1/2" x 3/8" x 3'-8 3/8"	ST 298
	DUS-3	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 3/8"	ST 298
CONNECTION BAR	CB1	1	1" ⌀ x 3"	ST 400
	CB2	6	3/16" ⌀ x 1'-3"	ST 400
	CB3	8	1 3/8" ⌀ x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3" x 2" x 3/8" x 0'-2"	ST 400
	P2	1	4" x 2" x 1/4" x 1'-0"	ST 400
	P3	1	4" x 3" x 1/4" x 1'-0"	ST 400
	P4	3	4" x 2" x 1/4" x 1'-8"	ST 400
	P5	1	4" x 2" x 1/4" x 1'-9"	ST 401
#8 SHEAR STUD	SA2	8	#8 x 4 3/4" AR x 0'-4"	ST 406
PATCH PLATES	PP1	18	2" x 5/16" x 0'-8"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR BOXES.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/2" x 1" FULL THROAT FILLET.

NO	DATE	REVISION	BY

REF. DRWGS.

7-AB2-3 & 10	7-22-68
7-AB3-11	7-22-68
7-AB4-3, 3.1	1-3 -68
7-AB4-15 & 16, 39	7-22-68
7-AB4-42	10-15-68
SA-124	10-11-68
7-AB1-3	7-22-68
7-AB1-6, 7 & 8	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 84-91, 93-106 (N)

PANEL E1B - 20' x 59'-8 1/2"

FABRICATION BY ACME STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

APPROVED FOR FABRICATION FOR PONYA — DATE 11/25/68

APPROVED FOR FABRICATION BY FOR FABRICATOR — DATE

DETAILED BY K. CARL WEBER

DESIGN DRAWING NO 7-AB3-11 — 7-22-68

DRAWN BY GAC — DATE NOV. 1, 1968

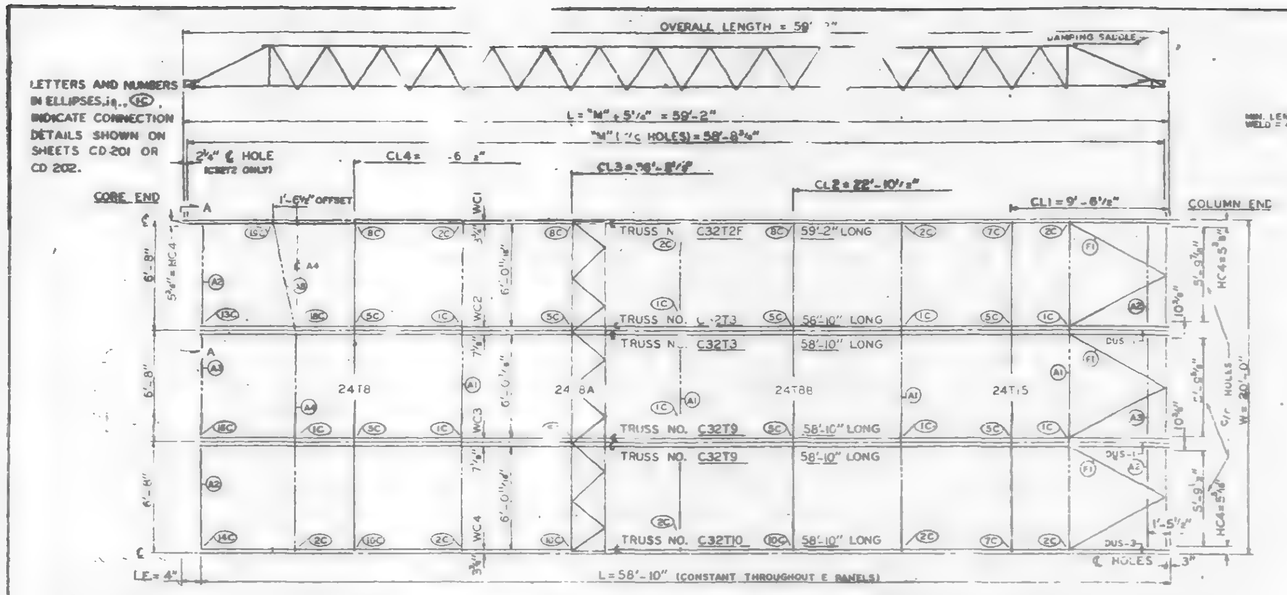
CHECKED BY T.M. CHURA — DATE NOV. 6, 1968

FABRICATION CONT NO W.T.C. 221

PLATE

IN CHARGE OF PROJ. DEV.

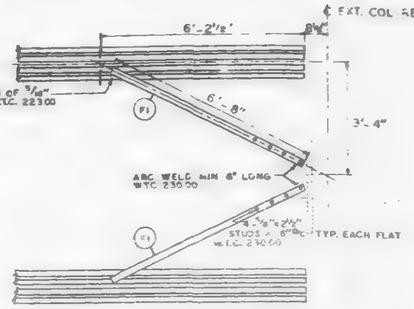
SHEET NO FP E1B



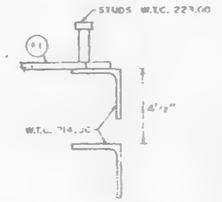
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. E1F SIZE 20' x 59'-2"

CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

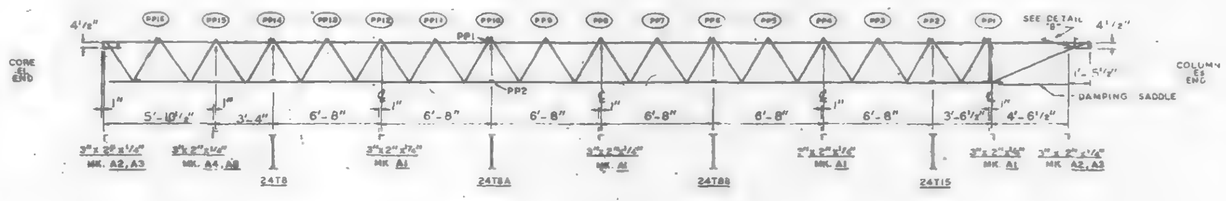


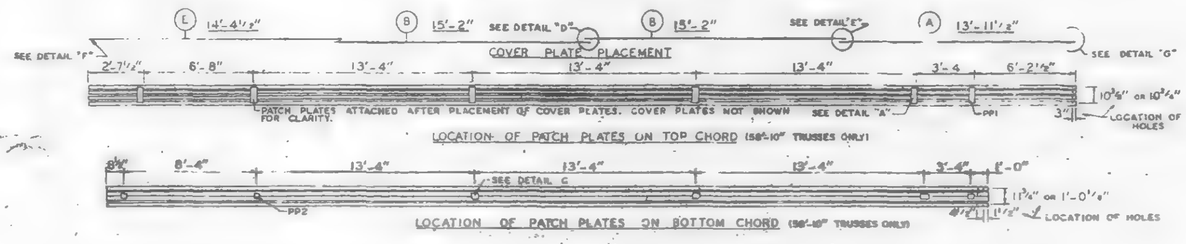
CLIP ANGLE LOCATION FOR DIAGONAL FLATS. 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

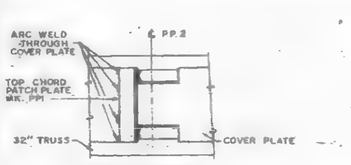
REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS.	SIZE	DWG
FLOOR TRUSSES	T2F	1	C32T2F - 59'-2"	ST 202F
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 208
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-	ST 208
	T8A	1	24T8A 19'-11"	ST 208A
	T8B	1	24T8 - 19'-11"	ST 208B
	T15	1	24T15 - 19'-11"	ST 215
3" x 2" x 1/4" ANGLE	A1	1	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" - [illegible]	ST 103
	A3	2	3" x 2" x 1/4" - 5'-11 5/8"	ST 403
	A4	1	3" x 2" x 1/4" x 4'-3"	ST 403
	A8	1	3" x 2" x 1/4" x 6'-3 5/8"	ST 403
DIAGONAL FLATS	F1	6	2" x 5/16" x 6'-3"	ST 402
COVER PLATES	A	3	9" x .0135" x 13'-11 5/8"	ST 303
	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 14'-4 1/2"	ST 303
PATCH PLATE	C1	20	2 3/4" x 1 1/2" x 1'-0" x 0'-6"	ST 400
	C2	4	2 3/4" x 1 1/2" x 1'-4" x 8"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 2'-0" x 3'-6 1/2"	ST 298
	DUS-3	1	3 1/2" x 3 1/2" x 2'-0" x 3'-6 1/2"	ST 298
CONNECTION BAR	CB1	1	1" ¢ x 1'-3"	ST 400
	CB2	6	1 3/16" ¢ x 1'-3"	ST 400
	CB3	6	1 3/16" ¢ x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3 5/16" x 1'-1 1/2"	ST 400
	P2	1	4 1/2" x .34" x 1'-4"	ST 400
	P3	1	4 1/2" x .34" x 1'-0"	ST 400
	P5	3	4 1/2" x 1/4" x 1'-6"	ST 400
	P7	1	4 1/2" x .34" x 6'-9"	ST 401
7/8 SHEAR CONNECTOR	SA2	6	7/8 ¢ HEADED x 6'-4"	ST 411
PATCH PLATES	PP1	18	2" x 1'-4" x 0'-9"	ST 400
	PP2	10	3" x 3/8" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR BETTER.

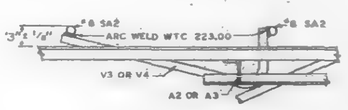
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FIELD THROAT FILLET.



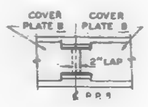




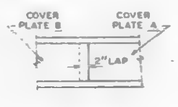
TOP VIEW - DETAIL "A"



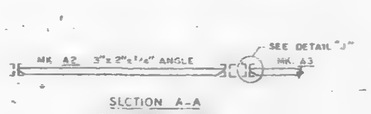
DETAIL "B"



DETAIL "D"

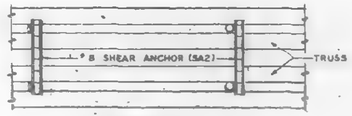


DETAIL "E"



SECTION A-A
END SUPPORT ANGLE

DETAIL "A" SECTION B-B

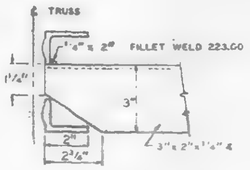


TOP VIEW - DETAIL "B"

DETAIL "F" DETAIL "G"

DETAIL "C"

SECTION C-C



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NO.	DATE	REVISION	BY

REF. DRWGS.

7-AB2-3 & 10-	7-22-68
7-AB3-11	7-22-68
7-AB4-1, 3, 11	1-3 -68
7-AB4-15 & 16, 38	7-22-68
7-AB4-42	10-3-68
SA-124	10-11-68
7-AB1-3	7-22-68
7-AB1-6, 7 & 8	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 47-48, 70-71 (N)

PANEL E1F - 20' x 59'-2"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

APPROVED FOR FABRICATION FOR PONYA. DATE 11/15/68

APPROVED FOR FABRICATION BY _____ FOR FABRICATOR DATE _____

DETAILED BY A. CARL WEBER

DESIGN DRAWING NO 7-AB3-11 7-22-68

DRAWN BY gdc DATE NOV. 1, 1968

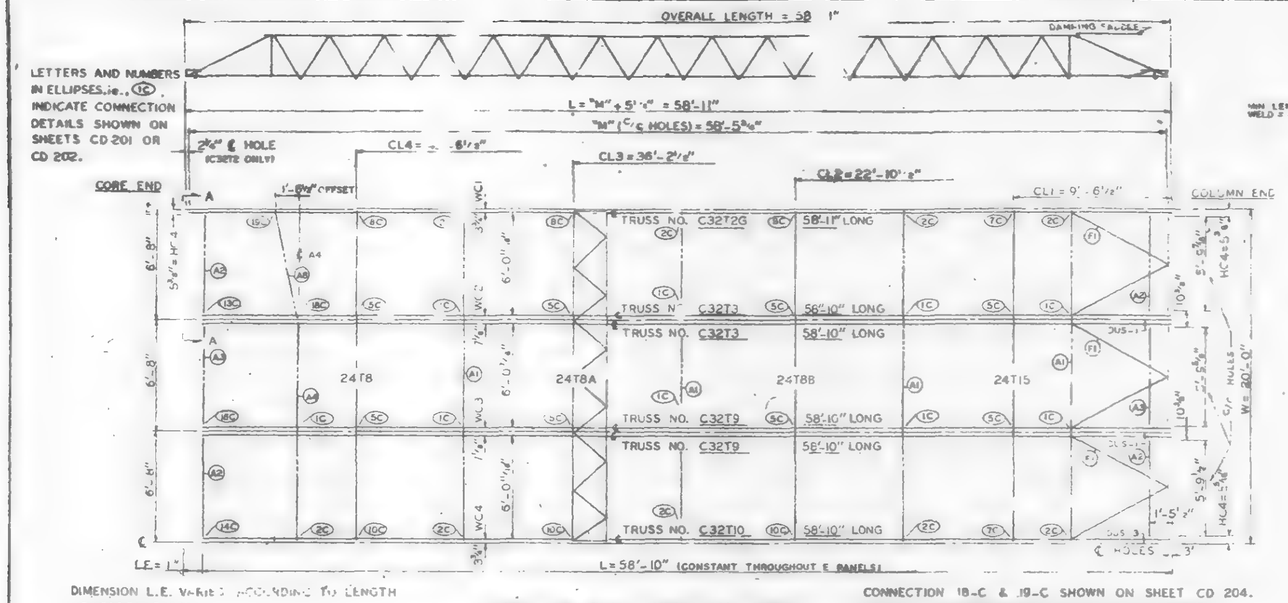
CHECKED BY T.M. CHUBA DATE NOV. 8, 1968

FABRICATION CONT NO 221

PLATE

IN CHARGE OF PROD. DEV.

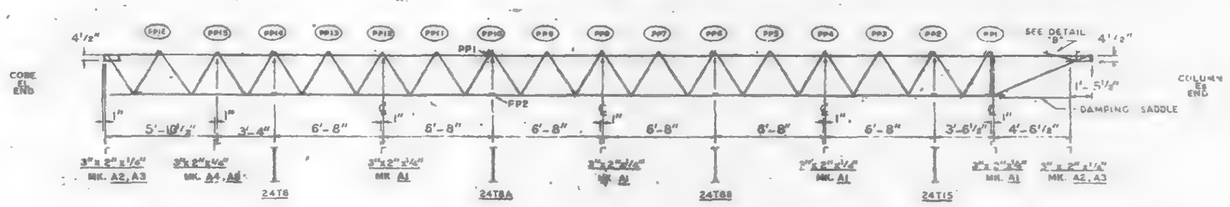
SHEET NO. FP E1F

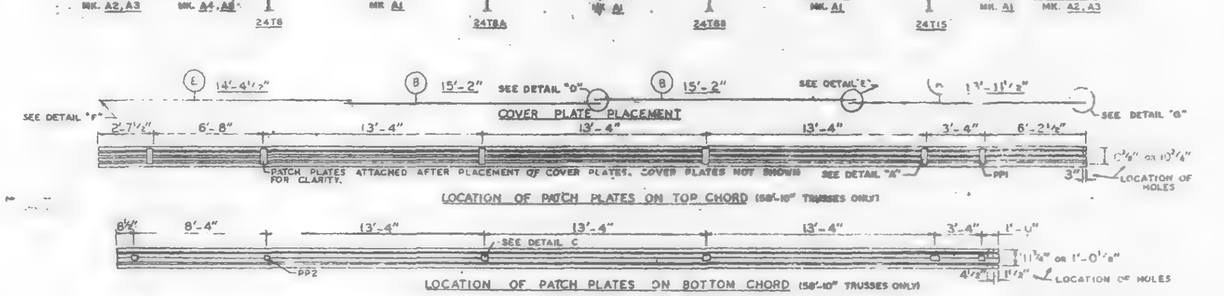


DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. E1G SIZE 20' x 58'-11"

CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.



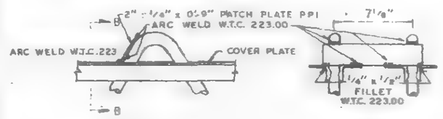


TOP VIEW - DETAIL "A"

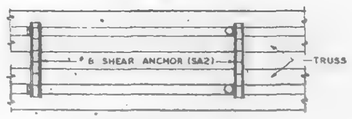
DETAIL "B"

DETAIL "D"

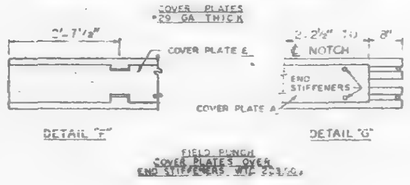
DETAIL "E"



DETAIL "A" SECTION B-B

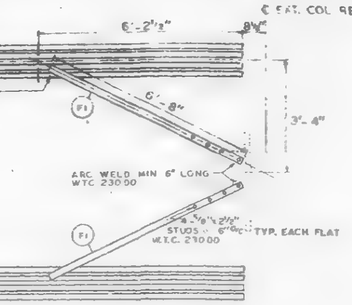


TOP VIEW - DETAIL "B"

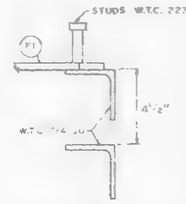


DETAIL "F" DETAIL "G"

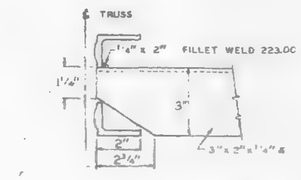
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED IN LIEU OF DECK BY W.T.C. 223.00



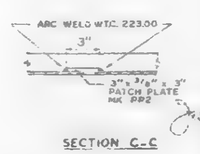
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.



DETAIL "J" END SUPPORT ANGLE ATTACHMENT

SECTION A-A END SUPPORT ANGLE

DETAIL "C"



SECTION C-C

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T2G	1	C32T2G 58'-11"	ST 202G
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST 208
	T8A	1	24T8A - 19'-11"	ST 208A
	T8B	1	24T8B - 19'-11"	ST 208B
	T15	1	24T15 - 19'-11"	ST 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
	A4	1	3" x 2" x 1/4" x 13" 3"	ST 405
	A8	1	3" x 2" x 1/4" x 6'-8 3/4"	ST 405
DIAGONAL FLATS	F	2	11" x 3" x 6'-8"	ST 402
COVER PLATES	A	3	9" x .0135" x 13'-11 1/2"	ST 303
	B	8	9" x .0135" x 15'-2"	ST 303
	E	3	9" x .0135" x 14'-2 1/2"	ST 303
BRIDGE SEAT	C1	20	2" x 1/2" x 3/4" x 0'-8"	ST 400
	C2	4	2" x 1 1/2" x 1/4" x 8"	ST 406
DAMPING SADDLE	DUS-2	2	3 1/2" x 3 1/2" x 3'-8 1/2"	ST 298
	DUS-3	1	3 1/2" x 3 1/2" x 3'-6 1/2"	ST 298
CONNECTION BAR	CB1	1	1" ø x 1'-3"	ST 400
	CB2	6	1" ø x 1'-3"	ST 400
	CB3	6	1" ø x 1'-3"	ST 400
CONNECTION PLATES	F1	5	3 1/2" x 3/8" x 1'-1"	ST 400
	F2	1	4'-2" x .34" x 1'-9"	ST 400
	PP3	1	4'-2" x .39" x 1'-0"	ST 400
	PP5	3	4'-2" x 1/4" x 1'-8"	ST 400
	PP6	1	4'-2" x .39" x 0'-9"	ST 401
"B" SHEAR ANCHOR	SA2	6	"B" REBAR x 0'-4"	ST 406
PATCH PLATES	PP1	18	2" x 1/16" x 0'-9"	ST 400
	PP2	18	3" x 3/16" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HY. ROCEN RODS IN THE E-70 SERIES OR 8018B1.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/16 x 1" FULL THROAT FILLET.

NO	DATE	REVISION	BY

REF. DRWGS.

7-AB2-3 & (1)	7-22-68
7-AB3-11	7-22-68
7-AB4-3, 3.1	1-3-68
7-AB4-15 & 16, 39	7-22-68
7-AB4-42	10-15-68
SA-124	10-11-68
7-AB1-3	7-22-68
7-AB1-6, 7 & 8	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 39-40 (N&S)

PANEL E1G - 20' x 58'-11"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

APPROVED FOR FABRICATION FOR PORT A — DATE 11/7/68

APPROVED FOR FABRICATION BY FOR FABRICATOR — DATE

DETAILED BY A. CAIRE — DESIGN DRAWING NO 7-AB3-11 7-22-68

DRAWN BY gdc — DATE NOV. 1, 1968

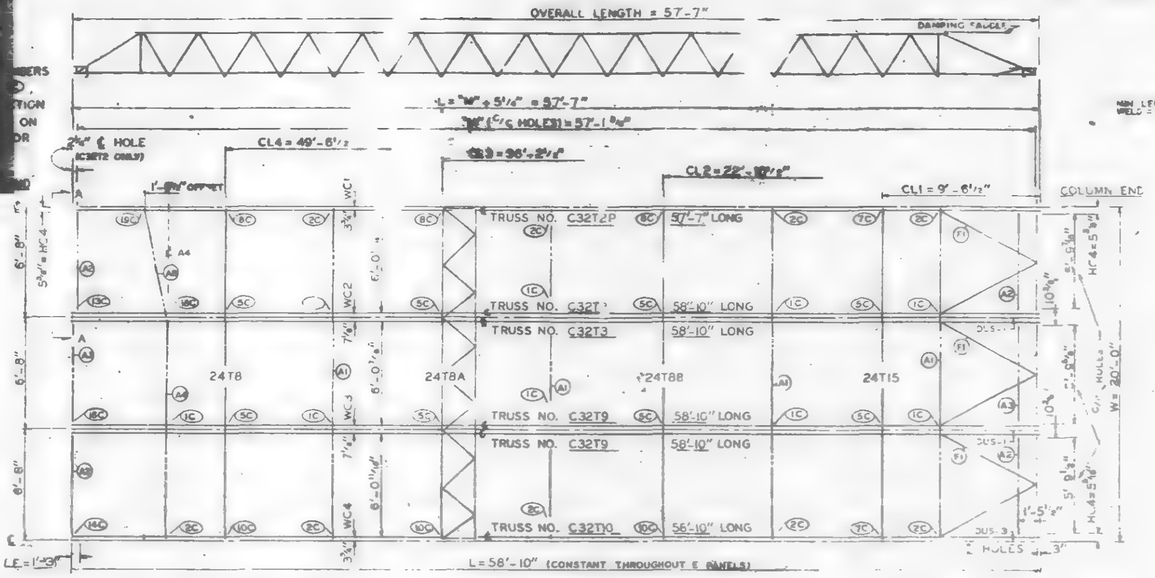
CHECKED BY T.M. CHURA — DATE NOV. 6, 1968

FABRICATION CONT NO W.T.C. 221

PLATE

NO CHARGE TO PROJECT

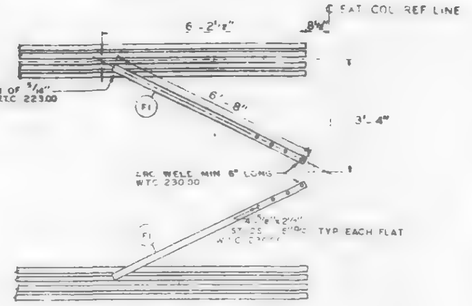
SHEET NO. FP E1G



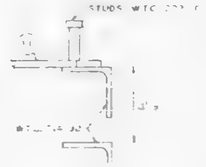
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. EIP SIZE 20' x 57'-7"

CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.



TYPICAL PLAN OF TOP CHORD END DIAGONAL FLATS & BEARING ANGLE FOR DECK BY WTC 223.00

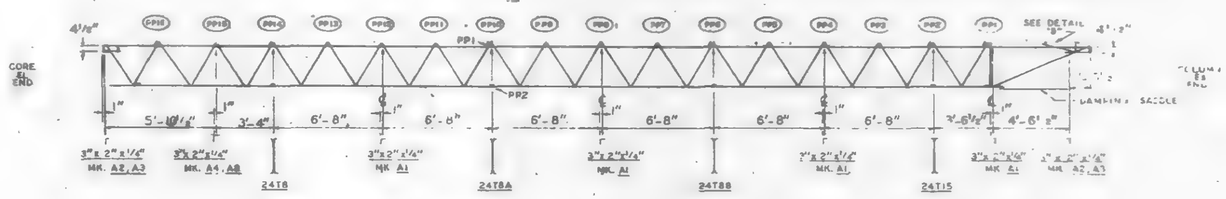


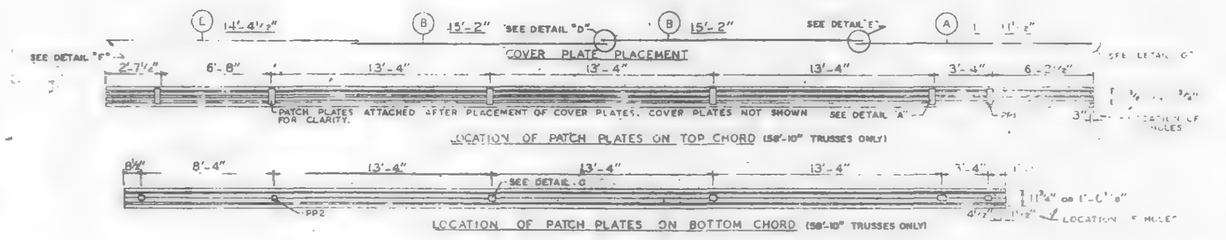
FOR DIAGONAL FLATS 4 1/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING

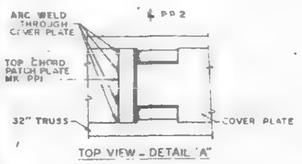
REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T2P	1	C32T2P - 57'-7"	ST 202P
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST [illegible]
BRIDGING TRUSSES	T8	1	24T8 - 18'-11"	ST [illegible]
	T8A	1	24T8A - 18'-11"	ST 208A
	T8B	1	24T8B - 18'	ST 208B
	T15	1	24T15 -	ST 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	-	3" x 2" x 1/4" x 5'-1 7/16"	-03
	A3	-	3" x 2" x 1/4" x 5'-11"	ST 403
	A4	-	3" x 2" x 1/4" x 3"	ST 403
	A8	-	3" x 2" x 1/4" x 6'-8 1/2"	ST 403
DIAGONAL FLATS	E	2	6" x [illegible]	ST 402
GUSSET PLATES	A	3	[illegible]	ST 303
	B	1	[illegible]	ST 303
			1/4" x 2'-3 5/8" x 4'-4 3/4"	ST 303
ANGLE CLIP	C	20	[illegible]	ST 400
	C7	4	[illegible]	ST 400
AMMINI SADDLE	D1	2	[illegible]	ST 208
	[illegible]	1	[illegible]	ST 208
CONNECTION PAD	CB1	1	1/2" ø x 3"	ST 400
	CB2	1	3/4" ø x 3"	ST 400
	CB3	6	3/8" ø x 1'-5"	ST 400
CONNECTION PLATES	[illegible]	5	3" x 3" x [illegible]	ST 400
	[illegible]	[illegible]	4" x 2" x 1/4" x 0'-6"	ST 400
	[illegible]	[illegible]	4" x 3" x 1/4" x [illegible]	ST 400
	[illegible]	5	4" x 3" x 1/4" x 0'-6"	ST 400
	[illegible]	[illegible]	4" x 3" x 1/4" x 0'-9"	ST 401
B SHEAR [illegible]	SA2	6	3" x 3" x 1/4" x 0'-4"	ST 400
PATCH PLATES	PP1	10	2" x 1" x 0'-9"	ST 400
	PP2	18	3" x 3/4" x 1'-9"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

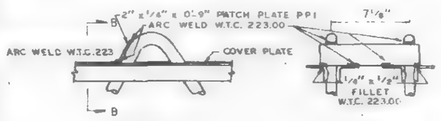
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 0" FILLE THROAT FILLET.



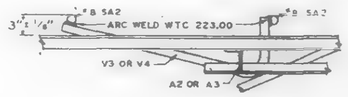




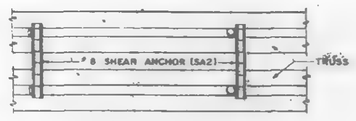
TOP VIEW - DETAIL "A"



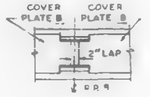
DETAIL "A" SECTION B-B



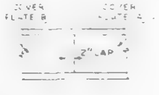
DETAIL "B"



TOP VIEW - DETAIL "B"



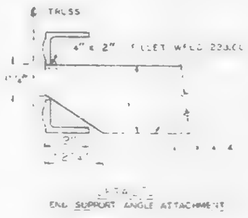
DETAIL "D"



DETAIL "E"

DETAIL "F" DETAIL "G"

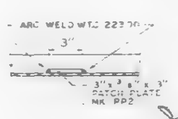
FIELD PUNCH COVER PLATE E OVER END STIFFENERS WTC 223.00



END SUPPORT ANGLE ATTACHMENT

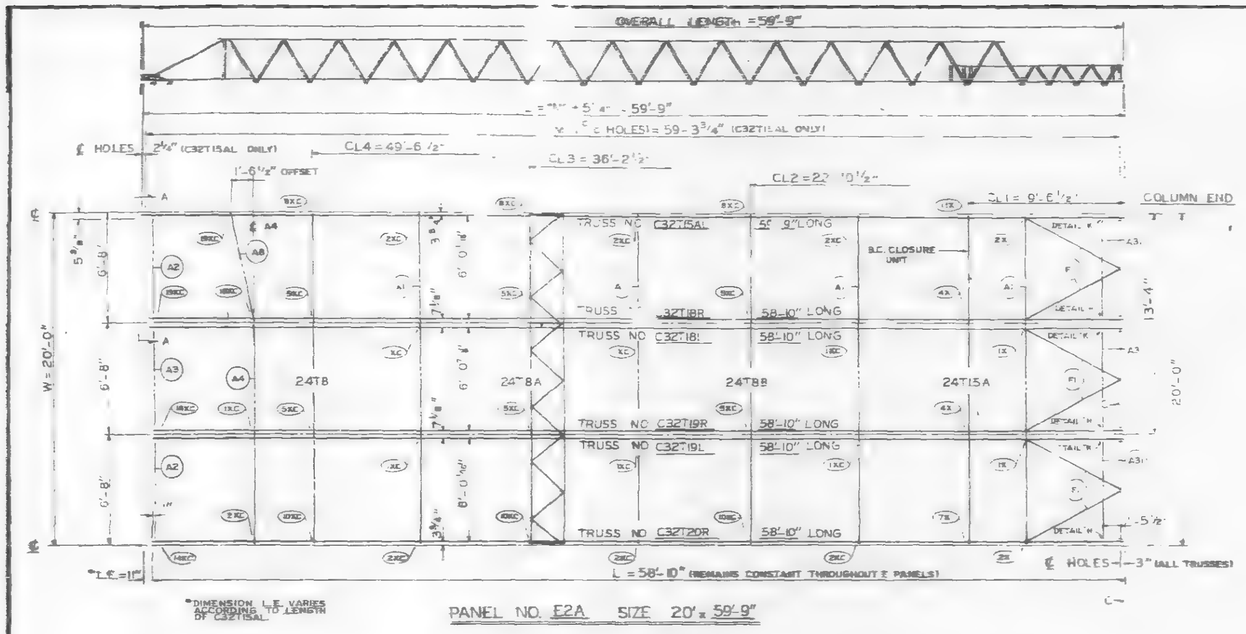
SECTION A-A END SUPPORT ANGLE

DETAIL "C"

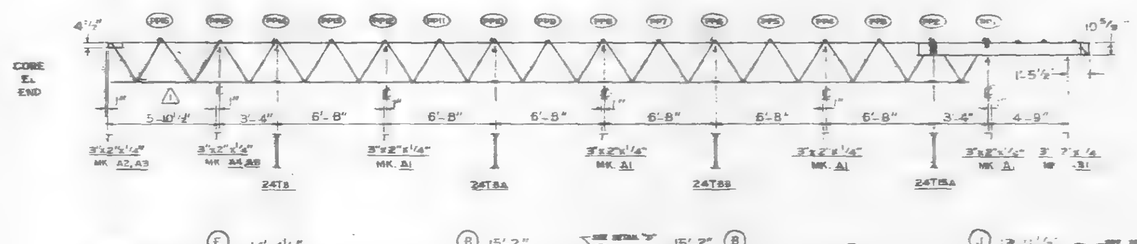


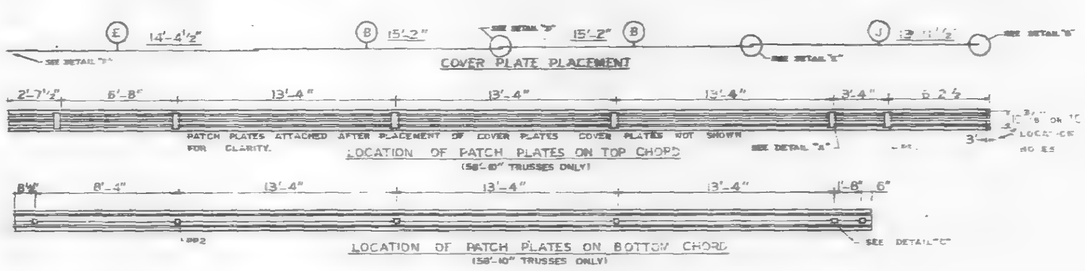
SECTION C-C

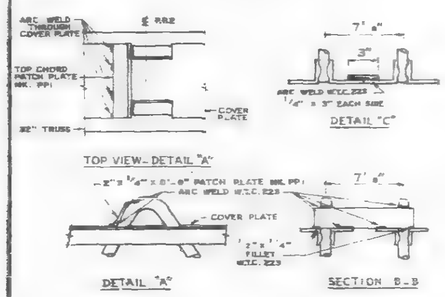
NO	DATE	REVISION	BY
[illegible]		[illegible]	
[illegible]		[illegible]	
[illegible]		[illegible]	

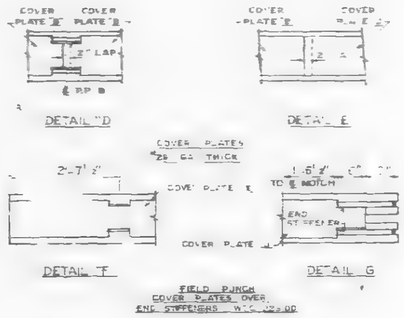


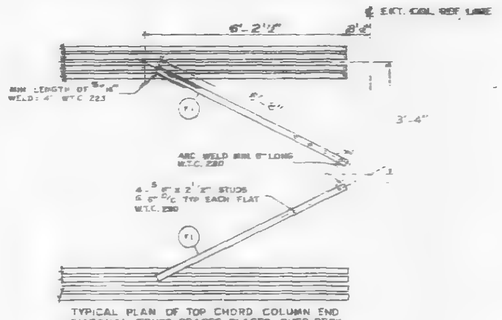
PANEL NO. E2A SIZE 20'x 59'-9"

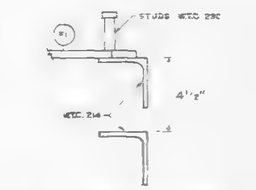


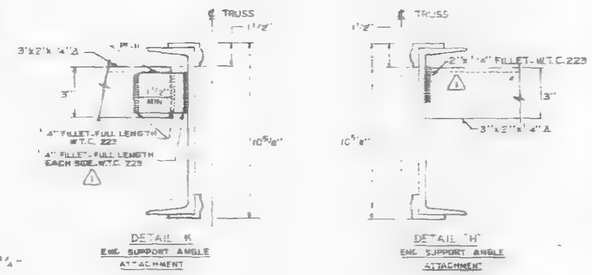


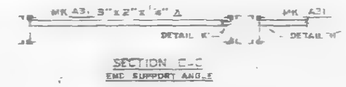


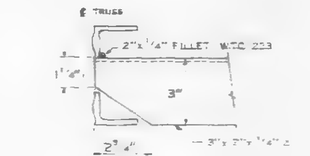


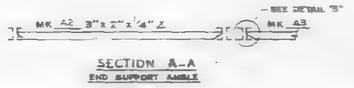












REQUIRED MATERIAL PER PANEL				REF. DWGS.
MATERIAL	MK	PCS.	SIZE	
FLOOR TRUSSES	T15AL	1	C32T15AL x 59'-9"	ST 201AL
	T18R	1	C32T18R x 58'-10"	ST 201
	T18L	1	C32T18L x 58'-10"	ST 201
	T19R	1	C32T19R x 58'-10"	ST 201
	T19L	1	C32T19L x 58'-10"	ST 201
	T20R	1	C32T20R x 58'-10"	ST 201
BRIDGING TRUSSES	TB	1	24TB x 19'-11"	ST 202
	TBA	1	24TBA x 19'-11"	ST 205
	TBB	1	24TBB x 19'-11"	ST 204
	T15A	1	24T15A x 19'-11"	ST 215A
3"x 2"x ¼" ANGLE	A1	4	3"x2"x¼"x 19'-[illegible]	ST 403
	A2	2	3"x2"x¼"x 4'-5"	ST 403
	A3	1	3"x2"x¼"x 2'-[illegible]"	ST 403
	A4	1	3"x 2"x¼"x13'-3"	ST 403
	A8	1	3"x 2"x ¼"x 8'-8"[illegible]	ST 405
	A31	3	3"x 2"x ¼"x5'-8"[illegible]	ST 410
CLOSURE PLATES	PP11	3	3"[illegible]" x 0'-2[illegible]"	ST 412
DIAGONAL FLATS	F1	6	5" x 5"x 8'-6"	ST 402
PATCH PLATES	PP1	18	2"x ¼" x 0'-9"	ST 400
	PP2	18	3"x ⅜" x 0'-3"	ST 400
COVER PLATES	B	6	9"x .0135" x 15'-2"	ST 303
	E	3	8" x .0135" x 14'-4[illegible]"	ST 303
	J	3	9"x .0135" x 13'-11[illegible]"	ST 304
B.C. CLOSURE UNIT	B.C.	1	1'-6" D x 6'-6½"	ST 215A
ANGLE CLIPS	C1	20	2"x 1½"x .25"x 6"	ST 400
	C2	4	2½"x 1½"x .25"x 6"	ST 400
⅞" SHEAR ANCHOR	SA2	9	⅞" STUD x 0'-8"	ST 400
CONNECTION BAR	CB1	2	1" x 1'-3"	ST 400
	CB2	6	1⅜" x 1'-3"	ST 400
	CB3	6	1⅜" x 1'-5"	ST 400
CONNECTION PLATES	P1	4	3½" x ⅜" x 6½"	ST 400
	P2	1	4½" x .38" x 0'-9"	ST 400
	P3	1	4½" x .38" x 1'-0"	ST 400
	P5	3	4½" x 1¼" x 1'-6"	ST 400
	P6	1	4½" x .38" x 0'-9"	ST 401
	P8	6	3" x ½" x 1'-2"	ST 408

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS. ie (M)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 82 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x¼" FULL THROAT FILLET.

NO.	DATE	REVISION	BY
1	2-4-69	AS NOTED	B.D.C.

REF DRWG.

7-AB3-32	10-4-68
7-AB3-24	8-15-68
7-AB1-14, 17, 18 & 19	10-4-68
7-AB2-3	7-22-68
7-AB2-16	10-4-68
SA-124	10-11-68

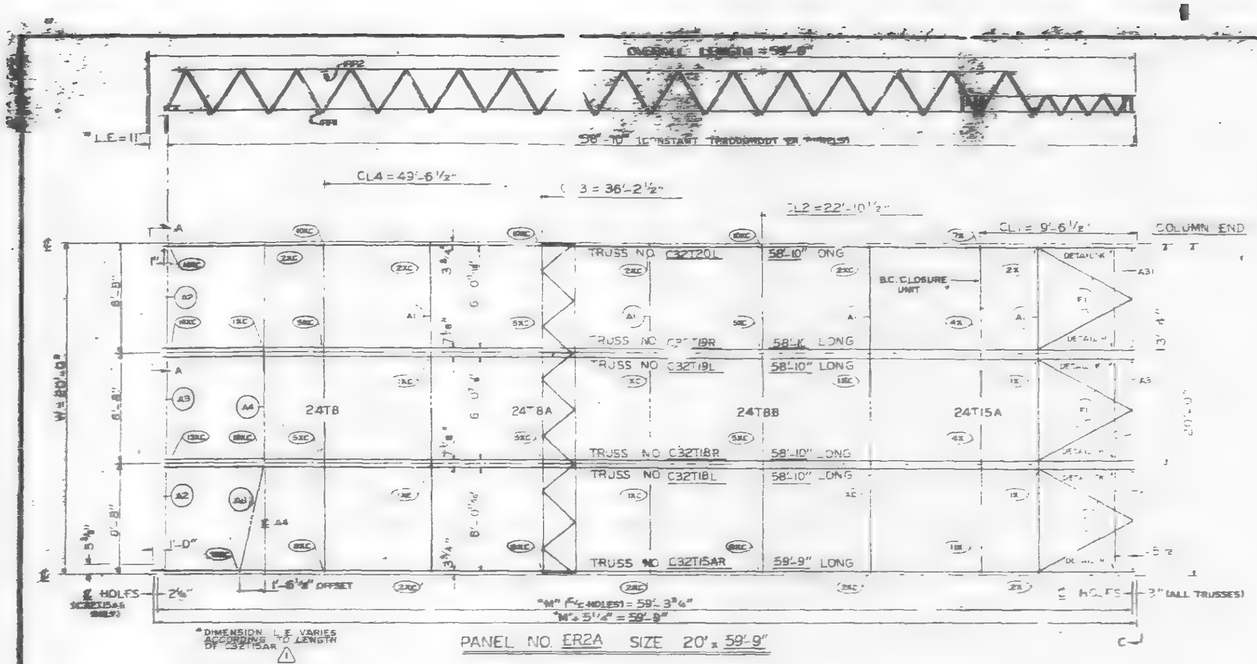
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)

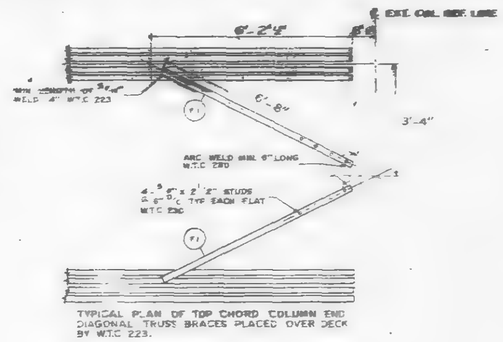
PANEL E2A - 20'x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY.

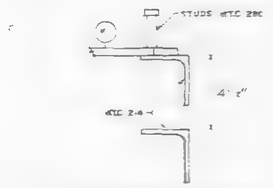
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-32	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.&	DATE 12/18/68	DRAWN BY [illegible] DATE DEC. 5, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. SHUBA DATE DEC. 5, 1968	IN CHARGE OF PROJ. DEN
DETAILED BY A.C. HEISE		FABRICATION CONT. NO W.T.C. 221	SHEET NO FP E2A



* DIMENSION L-E VARIES ACCORDING TO LENGTH OF 32" TRUSS



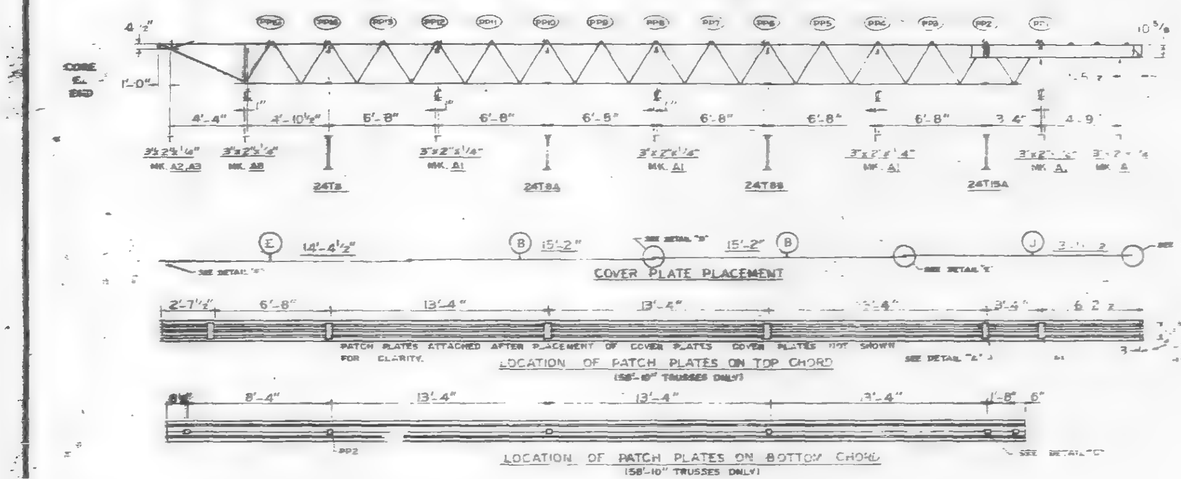
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



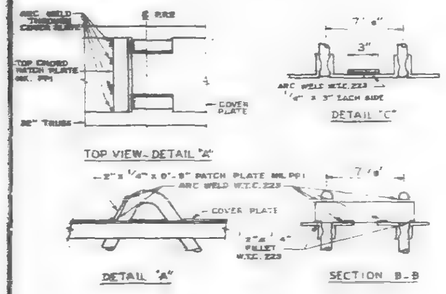
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

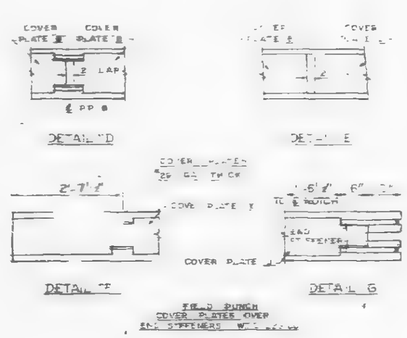
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS.	SIZE	MARKS
FLOOR TRUSSES	[illegible]	8	C32T20R x 58'-10"	ST 208L
	[illegible]	4	C32T19R x 58'-K"	ST 208
	[illegible]	4	C32T19L x 58'-10"	ST 208
	20L	4	C32T20L x 58'-10"	ST 208L
BRIDGING TRUSSES	TB	1	24TB x 18'-11"	ST 208
	TBA	1	24TBA 18'-11"	ST 208A
	TBB	1	24TBB x 18'-11"	ST 208B
	T15A	1	24T15A x 18'-11"	ST 215A
3"x 2"x 1/4" ANGLE	A1	4	3"x2"x1/4"x 18'-11"	ST 403
	A2	2	3"x2"x1/4"x5'-1"	ST 403
	A3	1	3"x2"x 1'-4"x5'-1"	ST 403
	A4	2	3"x2"x 1'-4"x19'-3"	ST 403
	A8	2	3"x2"x 4'-6"x6'-8"	ST 405
	A31	3	3"x2"x1/4"x5'-8"	ST 410
CLOSURE PLATES	PC1	3	3"x 1'-0"x 1'-2 3/4"	ST A 2
DIAGONAL FLATS	F1	6	4" x 5'-8" x 6'-8"	ST 402
PATCH PLATES	P1	18	2"x1/4" x 0'-9"	ST 400
	PP2	18	3"x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9"x.0135" x 15'-2"	ST 303
	E	3	9"x.0135" x 14'-4 1/2"	ST 303
	J	3	9"x.0135" x 6'-1 1/2"	ST 304
B.C. CLOSURE UNIT	B.C.	1	1'-4" D x 18'-6 1/2"	ST 215A
ANGLE CLIPS	C1	20	2"x1"x4"x.25"x8"	ST 400
	C2	4	2"x1"x4"x.25"x8"	ST 400
#8 SHEAR ANCHOR	SA2	0	#8 REBAR x 0'-8"	ST 400
CONNECTION BAR	CB1	2	1" 8 x 1'-3"	ST 400
	CB2	6	3/4" 8 x 1'-3"	ST 400
	CB3	6	1/8" 8 x 1'-5"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 6'-1"	ST 400
	P2	1	4 1/2" x .38" x 0'-9"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400
	P5	2	4 1/2" x 1/4" x 1'-8"	ST 400
	P6	1	4 1/2" x .38" x 0'-8"	ST 401
	P8	6	3" x 1'-2" x 1'-2"	ST 409

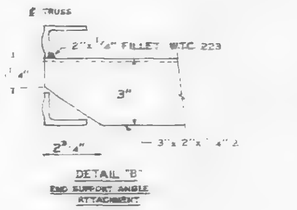
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (BK)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 62 ARE SHOWN ON SHEETS CD 210 THRU CD 220, UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.

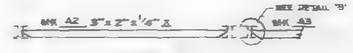


SECTION C-C
END SUPPORT ANGLE









NO.	DATE	REVISION	BY
1	2-4-69	AS NOTED	

REF DRWG.

7-A83-33	10-4-68
7-A83-24	8-15-68
7-A81-14, 17, 18 & 19	10-4-68
7-A82-3	7-22-68
7-A82-14	10-4-68
SA-124	10-11-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)

PANEL ER2A - 20' x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO 7-A83-33, PLATE

APPROVED FOR FABRICATION FOR P.O.N.Y.A. DATE 2/28/69

DRAWN BY [illegible] DATE DEC. 5, 1968

APPROVED FOR FABRICATION BY [illegible] DATE

CHECKED BY THE CHUBB DATE DEC. 5, 1968

IN CHARGE OF PROD. DEV.

DETAILED BY [illegible]

FABRICATION CONT NO W.T.C. 221

SHEET NO FP ER2A

NUMBERS AND LETTERS IN CIRCLES, ⊕ AND MACHINE CONNECTION DETAILS ARE SHOWN — OMITTED.

SMALL CAMBER = 2" @ MID

L = 58'-10"

CL 4 = 49'-6 1/2"

CL 3 = 36'-2 1/2"

CL 2 = 22'-10 1/2"

CL 1 = 8'-6 1/2"

CORE END

COLUMN END

TRUSS NO. C32T2DL 58'-10"

TRUSS NO. C32T2IR 58'-10"

TRUSS NO. C32T2IL 58'-10"

TRUSS NO. C32T22 58'-10"

24T7C 24T7D 24T7E 24T14A

DETAIL 'U' DETAIL 'D & K' DETAIL 'H' DETAIL 'V' DETAIL 'J' DETAIL 'T' DETAIL 'Q' DETAIL 'S' DETAIL 'F' DETAIL 'Z'

EXT. COL. REF. LINE

82 FLOOR

25, 59, 92 FLOORS

L = 58'-10"

COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD

PP1 PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

LOCATION OF HOLES

LOCATION OF PATCH PLATES ON BOTTOM CHORD

PP2

TOP VIEW DETAIL "A"

ARC WELD THROUGH COVER PLATE

TOP CHORD PATCH PLATE PP-1

COVER PLATE

32" TRUSS

DETAIL "A"

ARC WELD CONTRACT 223.00

DETAIL "C"

SECTION D-D

SECTION A-A

END SUPPORT ANGLES

SECTION E-E

PATCH PLATE PP-2

DETAIL "J"

END SUPPORT ANGLE ATTACHMENT

DETAIL "B"

END SUPPORT ANGLE ATTACHMENT

SECTION B-B

DETAIL "H"

SECTION J-J

DETAIL "F"

SECTION H-H

DETAIL "G"

DETAIL "D"

SECTION F-F

SECTION G-G

DETAIL "E"

REQUIRED MATERIAL PER PANEL				SEE DETAIL
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	C2L	1	C32T2DL- 58'-10"	ST2DL
	C2I	1	C32T2IL- 58'-10"	ST2IL
	C2I	1	C32T2IR- 58'-10"	ST2IR
	C22	1	C32T22- 58'-10"	ST"
BRIDGING TRUSSES	T7C	1	24T7C - 19'-6"	ST207C
	T7D	1	24T7D - "	ST207D
	T7E	1	24T7E - 19'-6"	ST207E
	T14A	1	24T14A - 19'-6"	ST244A
3"x 2"x 1/4" ANGLES	A10	1	3"x2"x1/4"x2'-7 15/16"	ST404
	A2	1	3"x2"x1/4"x5'-11"	ST404
	A13	1	3"x2"x1/4"x 5'-11 15/16"	ST404
	A35	1	3"x2"x 1/4"x 5'-8 1/8"	ST403
	A36	1	3"x2"x1/4"x5'-8 5/8"	ST403
	A37	1	3"x2"x1/4"x 2'-10"	ST403
	A38	3	3"x2"x1/4"x 6'-4"	ST403
	A39	1	3"x2"x1/4"x 2'-8"	ST403
	A40	2	3"x2"x1/4"x 6'-2"	ST403
	A41	1	3"x2"x1/4"x 2'-10 5/16"	ST403
	A25	1	3"x2"x1/4"x 13'-3"	ST403
ANGLE ASSEMBLY	AA21	1	SEE REF. DRWG.	ST411
	AA22	1	SEE REF. DRWG.	ST411
	AA23	1	SEE REF. DRWG.	ST411
	AA24	1	SEE REF. DRWG.	ST412
	AA25	1	SEE REF. DRWG.	ST412
	AA26	1	SEE REF. DRWG.	ST412
	AA5	3	SEE REF. DRWG.	ST404
PATCH PLATES	PP1	6	2"x 1/4" x 0'-9"	ST400
	PP2	6	3"x 5/8"x 0'-9"	ST400
COVER PLATES	A	1	9"x 0.135" x 13'-11 1/2"	ST383
	As	1	3 1/2"x 0.135"x 13'-11 1/2"	ST384
	B	2	9"x 0.135"x 15'-2"	ST383
	Bs	1	3 1/2"x 0.135" x 15'-2"	ST383
	Ls	1	3 1/2"x 0.135"x 15'-2"	ST384
	E	1	9" x 0.135"x 14'-4 3/4"	ST383
	Es	1	3 1/2"x 0.135" x 14'-4 3/4"	ST383
ANGLE CLIPS	C2	16	2 1/2"x 1 1/4"x 1/4"x 0'-8"	ST400
DIAGONAL FLATS	F1	4	1 1/2"x 3/8"x 6'-8"	ST402
	F2	7	1 1/2" x 3/8"x 8'-10 1/2"	ST402
	F3	1	1 1/2"x 3/8"x 6'-11 1/4"	ST402
	F4	1	1 1/2" x 3/8"x 7'-0"	ST 402
	F5	1	1 1/2"x 3/8"x 4'-4"	ST 402
MISC. PLATES	PF-1	2	1 1/2"x 1/2"x 0'-4"	ST400
	PF-3	5	3 1/2"x 3/8"x 0'-5"	ST400
	PF-7	1	5"x 3/8" x 0'-6"	ST401
	PF-8	5	3 1/2"x 1/4"x 0'-2 7/8"	ST401
	PF-10	8	4 1/2"x 1/4"x 0'-2 3/4"	ST401
	PF-11	1	3"x 3/4"x 0'-2 3/4"	ST402
EXTENDED END	EX	1	SEE REF DRWG	ST282
	22			

NO.	DATE	REVISION	BY
1	2-5-68	REREAL	WDC

SEE SHEET FP-F2-2 FOR NOTES, REF. DRWG & ADDITIONAL DETAILS

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

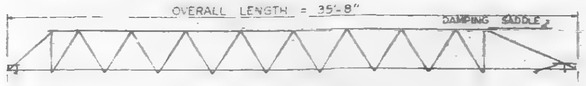
BLDG 1 FLOORS 25, 59 & 92 (NORTH & SOUTH)

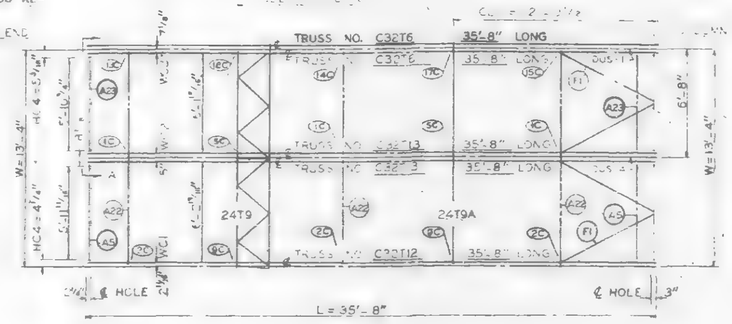
PANEL F2 19'-6" x 58'-10"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-383-34	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.& N.J. BY:	DATE	DRAWN BY: DATE DEC. 3, 1968	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHUBA DATE DEC. 4, 1968	IN CHARGE OF PROD. DEN.
DETAILED BY LACLEDE STEEL CO.		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F2

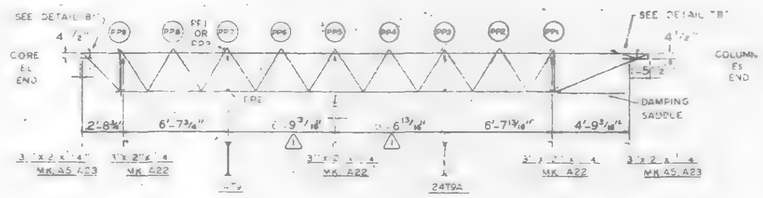
LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202. SPECIAL CONNECTIONS 13C, 14C, 15C, 16C, AND 17C ARE SHOWN ON SHEETS CD 209 CD 207, CD 205, CD 208, AND CD 206 RESPECTIVELY.



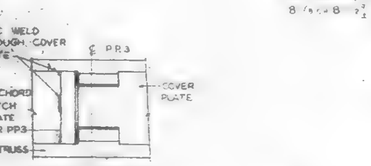


PANEL GR1 SIZE - 13'-4" x 35'-8"

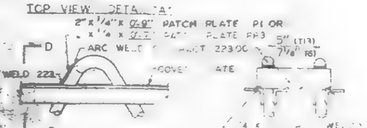
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.



PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T6.
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T13.

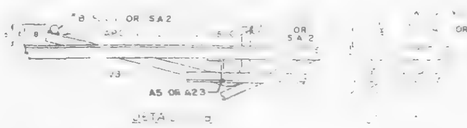


TOP VIEW - DETAIL "A"

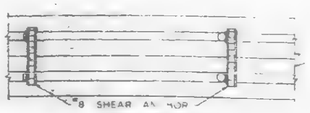


DETAIL "C"

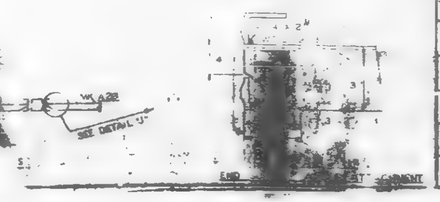
COVER PLATES 29 GA. THICK



DETAIL "D"



TOP VIEW - DETAIL "B"



REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
	T6	2	C32T6 - 35'-8"	ST 206
	T12	1	C32T12 - 35'-8"	ST 212
	T13	2	C32T13 - 35'-8"	ST 213
	T9	1	24T9 - 13'-2⅞"	ST 209
	T9A	1	24T9A - 13'-2¾"	ST 209A
	HC	2	3½" x 4" x 6'-1⅜"	ST 403
	A22	3	3" x 2" x 11'-3½"	ST 405
	A23	2	3" x 2" x 8'-0⅜"	ST 405
	C	4	8" x 6'-8"	ST 402
	PP1	4	2" x 1'-4" x 0'-9"	ST 400
	PP2	8	3" x 1'-8" x 0'-3"	ST 400
	PP3	4	2" x 1'-4" x 0'-7"	ST 400
			2"	ST 303
	F		9" x .0135" x 7'-3" 2	ST 303
	G		9" x .0135" x 17'-10½"	ST 303
	F1	1	9" x .0135" x 17'-3½"	ST 303
	C1	8	2" x 1½" x 1¼" x 6"	ST 400
	SA1	3	⅝" REBAR x 0'-7"	ST 400
	SA2	3	⅝" REBAR x 0'-9"	ST 400
	S4		3" x 3" x ¼" x 3'-6"	ST 298
	DUS-1	1	3½" x 3½" x 2⅜" x 3'-8"	ST 298
CONNECTION PLATES				
SPECIAL CONNECTION UNITS	3C	1	SEE REF. DRWG.	ST 274
	14C	1	SEE REF. DRWG.	ST 272
	15C	1	SEE REF. DRWG.	ST 270
	16C	1	SEE REF. DRWG.	ST 273
	17C	1	SEE REF. DRWG.	ST 271

C1 ← Up to Fl 33 Tower A
Fl 34 ← up

(A) "C" CHANGE BECOMES EFFECTIVE AFTER 33rd FLOOR, TOWER A.

COVER PLATES MK. F1 & G1 TO BE USED WITH DOUBLE C32T13.
COVER PLATES MK. F & G TO BE USED WITH DOUBLE C32T6.
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T13.
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T6.

NO.	DATE	REVISION	BY
2	4-18-69	AS NOTED	G.D.C.
1	2-21-69	AS NOTED	G.D.C.

SKILLING-HELLE CHRISTIANSEN-ROBERTSON
Structural & Civil Engineers
APPROVED
APPROVED AS NOTED
RESUBMIT
CHECKED 1 SK

	5 31	3-69
	5 & 6	5-8-68
	39 41	3-68
		10-20-67
		3-68
	12 13	5-10-68
	4	4-1-68
	42	4-68

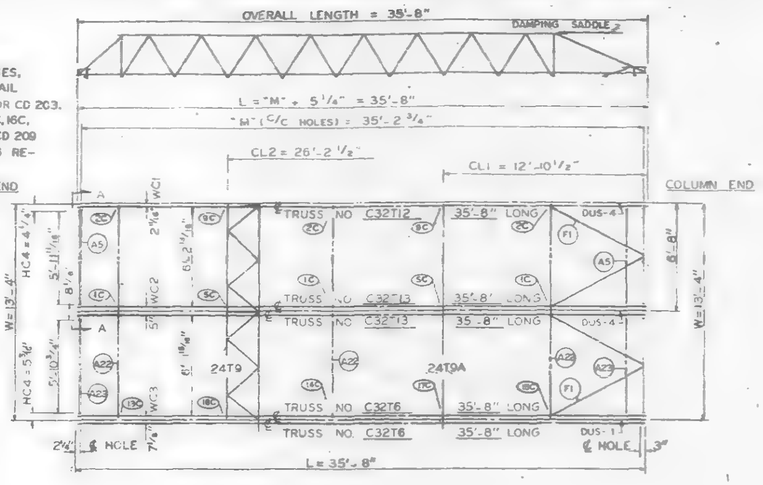
AS MEDIALS
R
TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-24, 28-40, 50-58, 60-66, 68-74, 84-91 &
-106 (EAST & WEST) 75-83 (W) 46-49 (E) PANEL GR1 - 13'-4" X 35'-8"
BLDG. B FLOORS 14-24, 28-38, 50-58, 60-74, 84-91 & 93-108 (N & S) 39-83 (N) 42-49 (S)

FABRICATION BY AMERICAN BRIDGE STEEL COMPANY

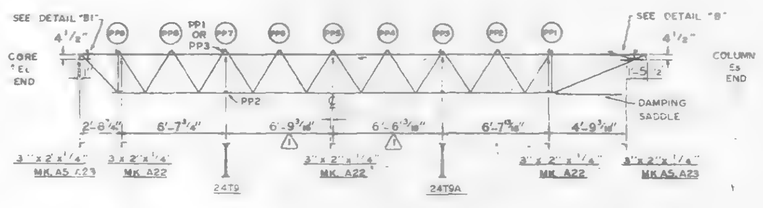
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING 7-68
APPROVED FOR FABRICATION BY _____ FOR PONYA	DATE
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE
DETAILED	CHECKED
	DATE
	FABRICATION
	W.T.C. 221

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201,CD202 OR CD 203. SPECIAL CONNECTIONS 13C, 14C, 15C, 16C, AND 17C ARE SHOWN ON SHEETS CD 209 CD 207, CD 205, CD 208, AND CD 206 RESPECTIVELY.

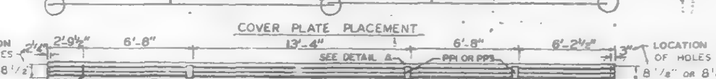


PANEL G1 SIZE 13'-4" x 35'-8"

℄ DIMENSION HC4 ARE RELATED TO HOLES BUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ FOR THE COLUMN CLIPS & BRACES.

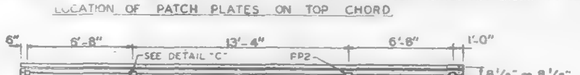


PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T8.
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T13.

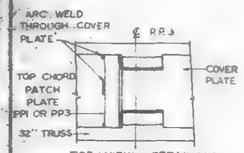


COVER PLATE PLACEMENT

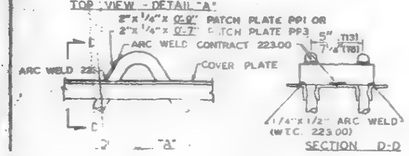
LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD



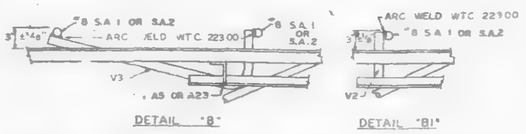
TOP VIEW - DETAIL "A"



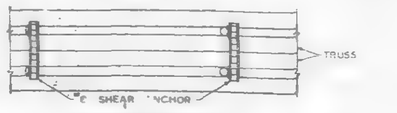
"A" SECTION D-D

DETAIL "D" DETAIL "E"

COVER PLATES 29 GA. THICK



DETAIL "B" DETAIL "B1"

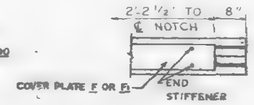


TOP VIEW - DETAIL "B"

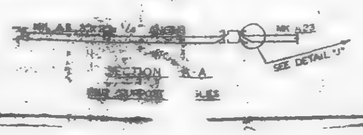
SECTION E-E

TO BE MADE WITH LOW HYDROGEN RODS IN THE FORM
ALL CONNECTION ARC WELDS SHALL BE
ALL THROAT

FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00

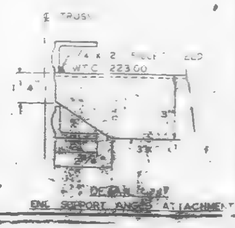


DETAIL "G"



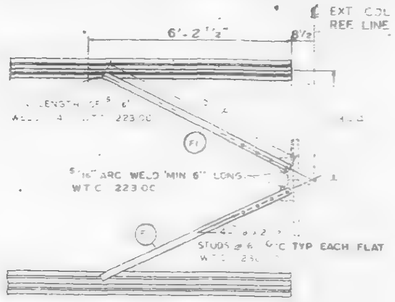
SECTION B-A

END SUPPORT ANGLES

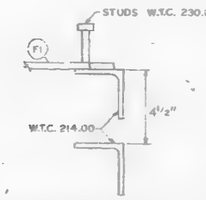


END SUPPORT ANGLE ATTACHMENT

COVER PLATES MK. F & G TO BE USED WITH DOUBLE C32T13.
COVER PLATES MK. F & G TO BE USED WITH DOUBLE C32T6.
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T13.
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T6.



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK @ WTC 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T6	2	C32T6 - 35'-8"	ST 206
	T12	1	C32T12 - 35'-8"	ST 212
	T13	2	C32T13 - 35'-8"	ST 213
BRIDGING TRUSSES	T9	1	24T9 - 13'-2 3/4"	ST 209
	T9A	1	24T9A - 13'-2 3/4"	ST 209A
3"x2"x1/4" ANGLE	A5	2	3"x2"x1/4"x8'-1 3/16"	ST 403
	A22	3	3"x2"x1/4"x13'-3 1/2"	ST 405
	A23	2	3"x2"x1/4"x6'-0 7/8"	ST 405
DIAGONAL FLATS	F	6	1 1/2"x5/8"x 6'-8"	ST 402
PATCH PLATES	PP1	4	2"x1/4" x 0'-8"	ST 400
	PP2	8	3"x 3/8" x 0'-3"	ST 400
	PP3	4	2"x 1/4" x 0'-7"	ST 400
COVER PLATES	S1	1	7"x.035"x17'-10 1/2"	ST 303
	F1	1	7"x.035 x17'-3 1/2"	ST 303
	G	1	6"x.0135"x17'-10 1/2"	ST 303
	F	1	6"x .0135"x 17'-3 1/2"	ST 303
ANGLE CLIPS 2	C1	84	2"x 1 1/4" x 1/4" x 8"	ST 400
"8 SHEAR ANCHOR	SA1	3	"8 REBAR x 0'-7"	ST 400
	SA2	3	"8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-4	1	3 1/2"x 3 1/2" x 3/8" x 3'-6 7/8"	ST 298
	DUS-1	1	3 1/2" x 3 1/2" x 3/8" x 3'-8 3/4"	ST 298
CONNECTION PLATES				
SPECIAL CONNECTION UNITS	13C	1	SEE REF. DRWG.	ST 274
	14C	1	SEE REF. DRWG.	ST 272
	15C	1	SEE REF. DRWG.	ST 270
	16C	1	SEE REF. DRWG.	ST 273
	17C	1	SEE REF. DRWG.	ST 271

2 "CHANGE BECOMES EFFECTIVE AFTER FLOOR 33, TOWER A.

Ft. 33 and

Fl 33 up

NO.	DATE	REVISION	BY
2	4-18-69	AS NOTED	G.D.C.
1	2-21-69	AS NOTED	G.D.C.

SKILLING · HELLE CHRISTIANSEN · ROBERTSON
Structural & Civil Engineers
APPROVED
APPROVED AS NOTED
REJECTED
Date 3/15/69 SK

REF DRWG.		
-	AB4-3 & 3.1	1-3-68
	7-AB4-15 & 16	5-6-68
	7-AB4-39 - 41	1-3-68
	SA-124	10-20-67
	7-AB3-2	1-3-68
	7-AB1-11 & 12	5-10-68
	7-AB2-8	2-15-68
	7-AB4-42	4-1-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24, 26-40, 50-58, 60-66, 68-74, 84-91 &...
3-106 (E & W) 45-49 (W) 80-83 (E) PANEL G1 - 13'-4" X 35'-8"
BLDG. B FLOORS 14-24, 26-40, 50-58, 60-74, 84-91, 83-106 (N & S) 80-83 (N) 45-49 (S)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-15	6-10-68 PLATE
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.	DATE	DRAWN BY G.E. DATE APRIL 10, 1968	
APPROVED FOR FABRICATION BY [illegible]	DATE	CHECKED BY J.M.CHUNG DATE APRIL 10, 1968	
DETAILED BY [illegible]		FABRICATION CONT. NO. W.T.C. 221	SHEET

LACLEDE STEEL CO.

EXT. COL. REF. LINE

PLAN OF TOP CHORD COLUMN END TRUSS BRACES PLACED OVER DECK

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

DETAIL "H" (OPP. HAND FOR FR PANEL)

DETAIL "X" (OPP. HAND FOR FR PANEL)

DETAIL "Z" (OPP. HAND FOR FR PANEL)

DETAIL "W" (OPP. HAND FOR FR PANEL)

DETAIL "S"

DETAIL "T"

DETAIL "T"

DETAIL "U"

DETAIL "Q"

DETAIL "R" (OPP HAND FOR FR5)

WELDS NOT IDENTIFIED IN DETAIL R ARE IDENTIFIED IN SECTION J-J.

SECTION J-J

SECTION J-J

DETAIL "V"

SECTION C-C

SECTION H-H (OPP HAND FOR FR PANEL)

DETAIL "J"

SECTION L-L

DETAIL "P" (OPP. HAND FOR FR PANEL)

SECTION K-K

DETAIL "M"

DETAIL "L"

COVER PLATES
"29 GA. THICK

DETAIL "N"

DETAIL "K"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C 22300

TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA20 (F5) AND AA20R (FR5 - OPP HAND)

NOTE

1. DIMENSION IS 10 1/4" FOR FLOORS 45-49 (SOUTH) 45 (NORTH), AND IS 9 1/4" FOR 79-83 (NORTH).

TABLE "1A"

	DIM "A" COL LINE			
FL	417	443	217	243
45	1 1/2	-	0	0
46	1 1/2	-	-	1 1/2
47	1 1/2	-	-	1 1/2
48	1 1/2	-	-	1 1/2
49	0	-	-	0
79	-	1 1/2	0	0
80	-	1 1/2	1 1/2	-
81	-	1 1/2	1 1/2	-
82	-	1 1/2	1 1/2	-
83	-	0	0	-

PANEL F5 — F2 USED WHEN DIM "A" = 0"
PANEL FR5 — F2R " " " " = 0"
F8A " " " " = 1 1/2"
F8AR " " " " = 1 1/2"

NO	DATE	REVISION	BY
2	4-24-69	AS NOTED	G.D.C.
1	4-9-69	AS NOTED	G.D.C.

SKILLING - HELLE CHRISTIANSEN - ROBERTSON
Structural & Civil Engineers
5/15/69 SIC

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

MISCELLANOUS FLOOR PANEL DETAILS FOR F5 & FR5 PANELS

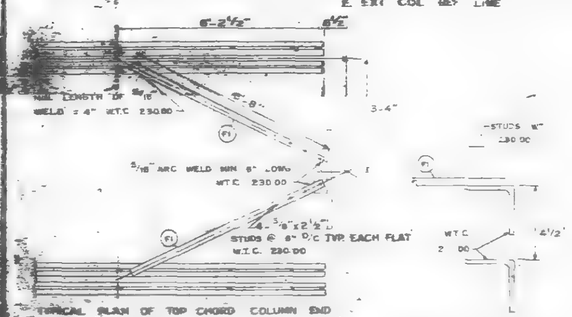
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-883-75 & 76
PLATE

APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A. DATE
DRAWN BY: D.B. DATE JAN. 20, 1969

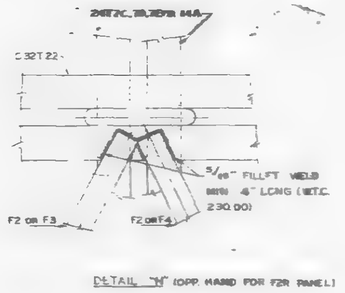
APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE
CHECKED BY: T.H.CHURA DATE JAN. 20, 1969
IN CHARGE OF PROD. DEV.

DETAILED BY A. CARL WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP - F5 - 2

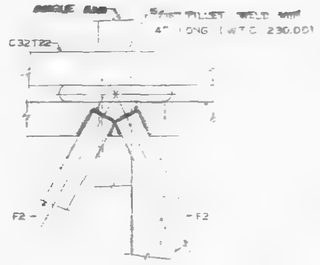


TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK W.T.C. 228.00

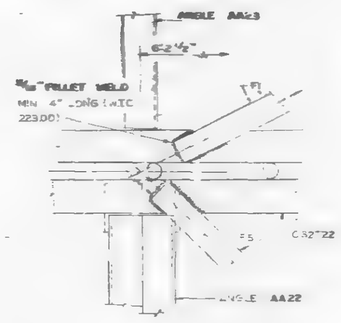
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING



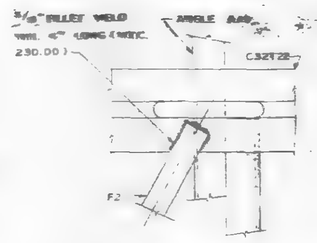
DETAIL "H" (OPP. HAND FOR F2R PANEL)



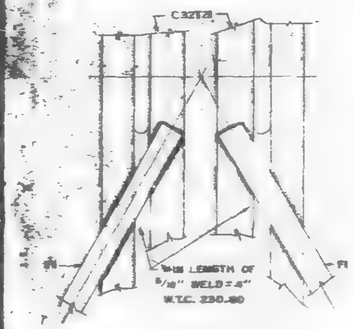
DETAIL "X" (OPP. HAND FOR F2R PANEL)



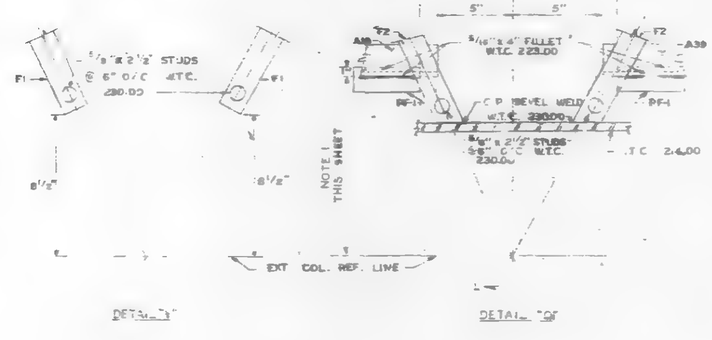
DETAIL "Z" (OPP. HAND FOR F2R PANEL)



DETAIL "W" (OPP. HAND FOR F2R PANEL)

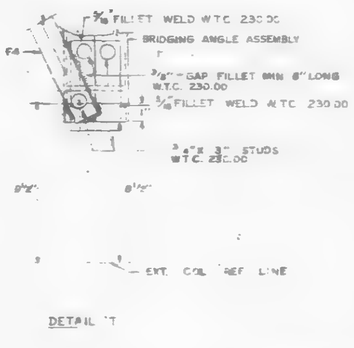


DETAIL "S"

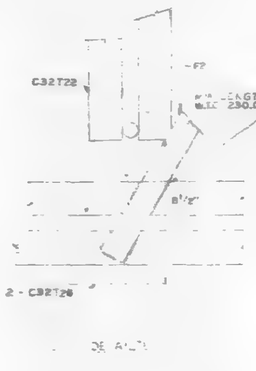


DETAIL "J"

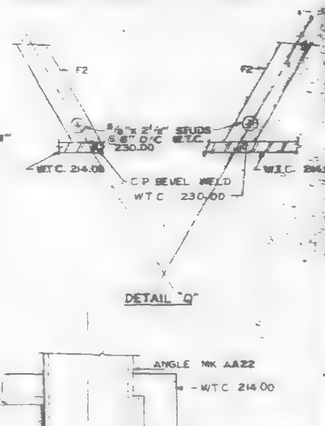
DETAIL "Q"



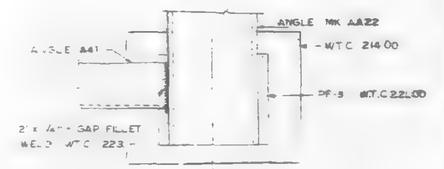
DETAIL "T"



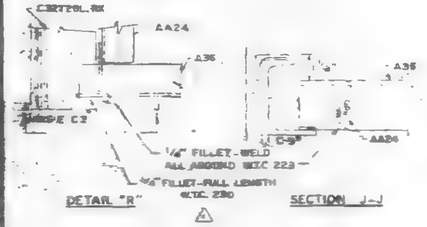
DETAIL "U"



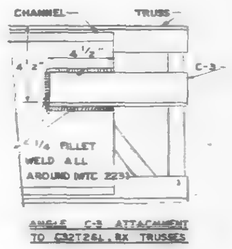
DETAIL "Q"



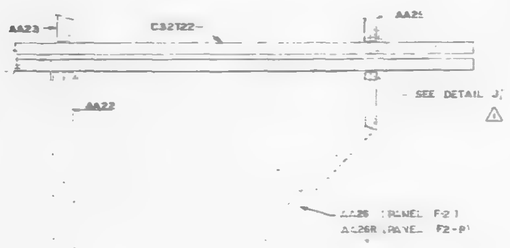
SECTION H-H (OPP. HAND FOR F2R PANEL)

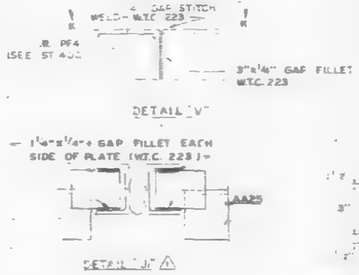


DETAIL "R" SECTION J-J

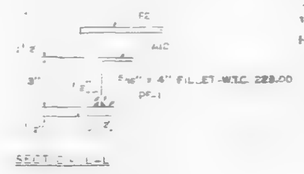


ANGLE C-3 ATTACHMENT TO C32T26L.BX TRUSSES

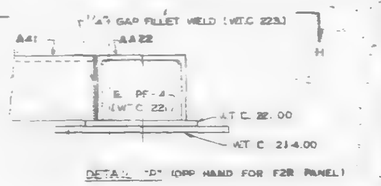




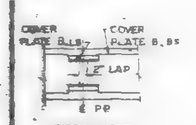
DETAIL "V" DETAIL "J"



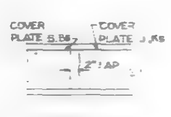
SECT. K-K



DETAIL "P" (OPP. HAND FOR F2R PANEL)

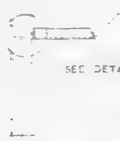


DETAIL "M"

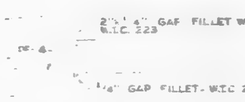


DETAIL "L"

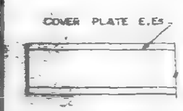
COVER PLATES #20 GA. THICK



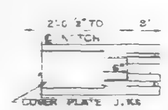
TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA26 (F2) AND AA26R (F2-R-OPP HAND)



SECTION K-K



DETAIL "N"



DETAIL "K"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C 223.00

NOTE
1. DIMENSION IS 10 3/4" UP TO ℄ TKCL FLOOR 74 AND IS 5¼" ABOVE FLOOR 74

(1)	2-5-69	AS NOTED	GDC
NO.	DATE	REVISION	BY

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

MISCELLANEOUS FLOOR PANEL DETAILS FOR F2 & F2-R PANELS

FABRICATION BY LACLEDE STEEL COMPANY

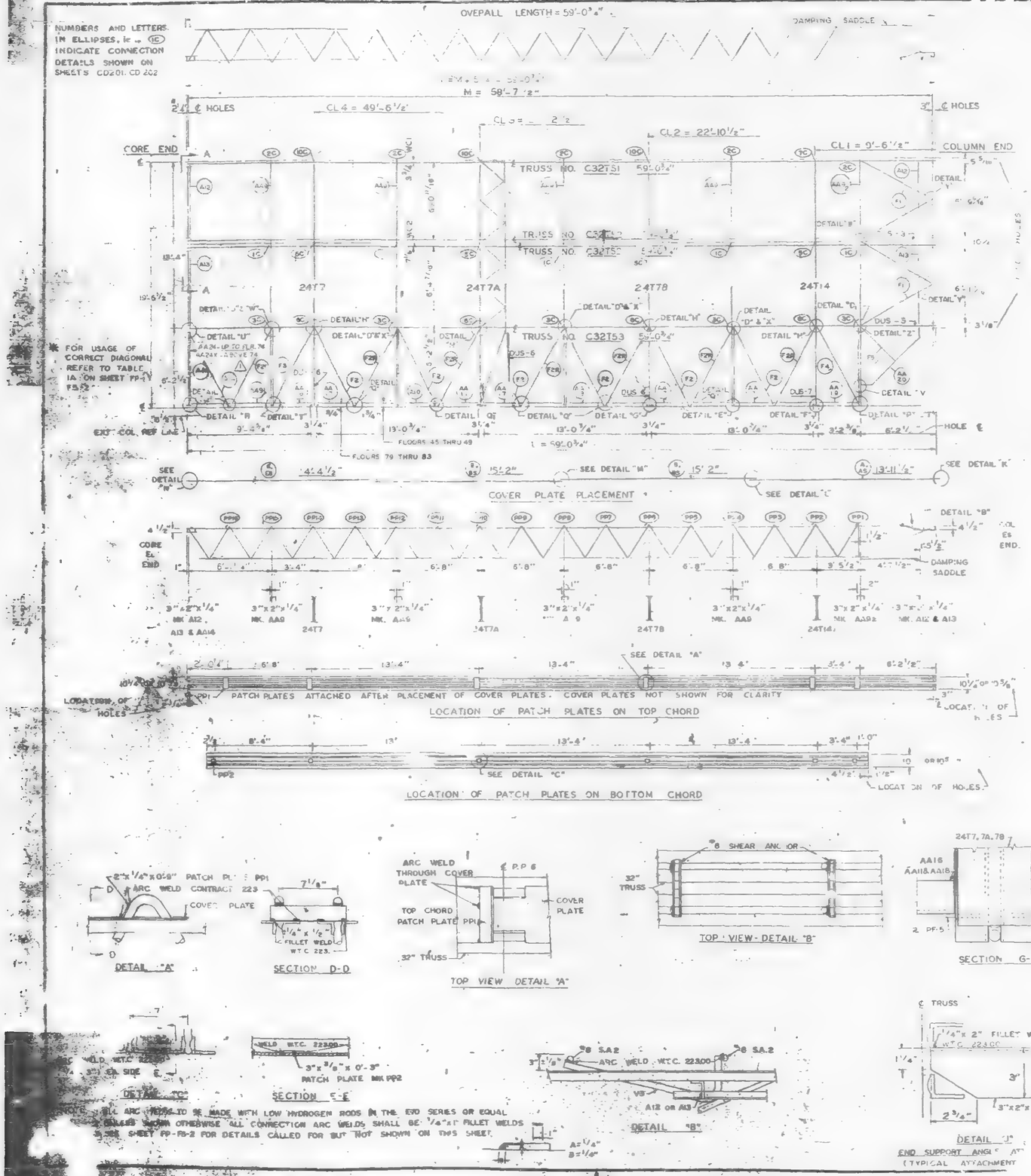
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7 AB3-3 & A35
PLATE

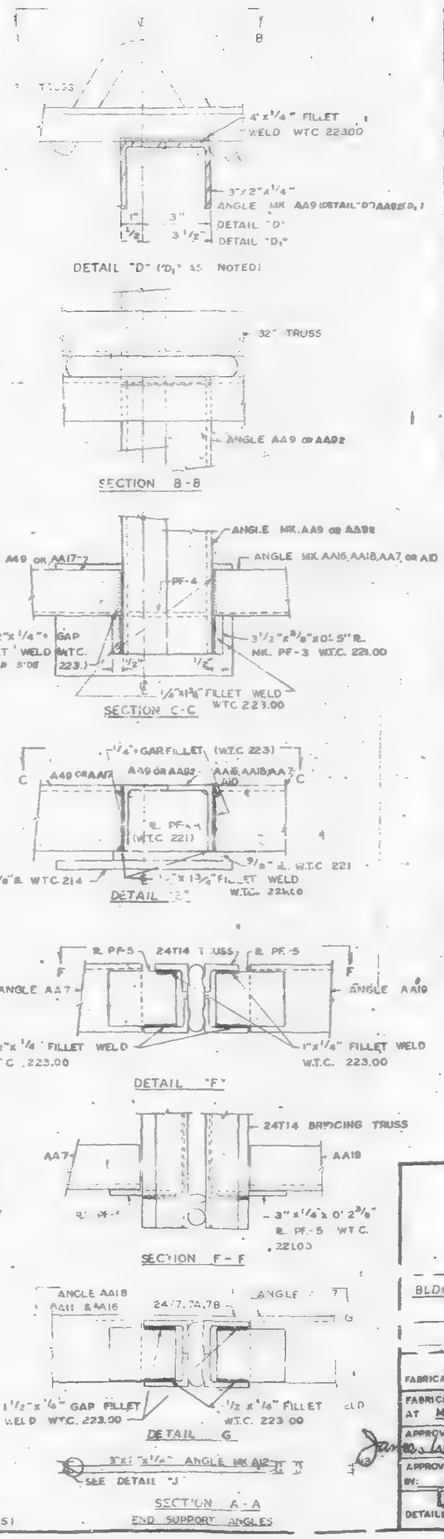
APPROVED FOR FABRICATION FOR P.O.N.Y.A. DATE 2/28/69
DRAWN BY R.A. DATE DEC. 30 1968

APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M.MURRA DATE DEC. 31 1968
IN CHARGE OF PROD. DEV.

DETAILED BY CARL WEBER
FABRICATION CONTR. NO. W.T.C 221
SHEET NO. FP-F2-2

NUMBERS AND LETTERS IN ELLIPSES, ie., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD201, CD 202

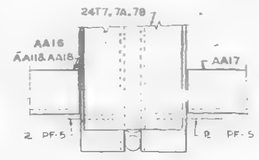


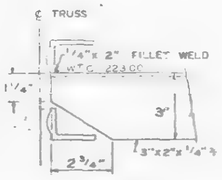


REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK	PCS	SIZE	DRWG
FLOOR TRUSSES	T51	1	C32T51 - 59'-0¾"	ST 251
	T52	2	C32T52 - 59'-0¾"	ST 252
	T53	1	C32T53 - 59'-0¾"	ST 253
BRIDGING TRUSSES	T7	1	24T7 - 19'-6"	ST 207
	T7A	1	24T7A - 19'-6"	ST 207A
	T7B	1	24T7B - 19'-6"	ST 207B
	T14	1	24T14 - 19'-6"	ST 214
3"x2"x 1/4" ANGLES	A12	1	3"x2"x1/4"x4'-7 15/16"	ST 404
	A12	2	3"x2"x1/4"x4'-11"	ST 404
	A13	2	3"x2"x1/4"x6'-3"	ST 404
	A49	1	3"x2"x1/4"x6'-0"	ST 413
ANGLE ASSEMBLY ** (AA24 IS REPLACED BY AA24x ABOVE FLR 74) ⚠	AA7	1	SEE REF DRWG	ST 404
	AA9	4	SEE REF DRWG	ST 404
	AA92		SEE REF DRWG	ST 404
	AA11	1	SEE REF DRWG	ST 404
	AA16	1	SEE REF DRWG	ST 404
	AA17	3	SEE REF DRWG	ST 404
	AA18	1	SEE REF DRWG	ST 404
	AA19	1	SEE REF DRWG	ST 404
	**AA24	1	SEE REF. DRWG	ST 412
DIAGONAL FLATS	F1	4	1½"x⅜"x 6'-8"	ST 402
	F2 & F2B	6 & 1	1½"x⅜"x 6'-10½"	ST 402
	F3	1	1½"x⅜"x 6'-11⅞"	ST 402
	F4	1	1½"x⅜"x 7'-0	ST 402
	F5	1	1½"x⅝"x 6'-6"	ST 402
PATCH PLATES	PP1	6	2"x1/4"x 0'-9"	ST 400
	PP2	6	3"x⅜"x 0'-3"	ST 400
COVER PLATES	A	1	9"x.0135"x13'-11½"	ST 303
	B	2	9"x.0135"x 15'-2"	ST 303
	E	1	9"x.0135"x14'-4½"	ST 303
	A5	1	3½"x.0135"x13'-11½"	ST 303
	B5	2	3½"x .0135"x15'-2	ST 303
	E5	1	3½"x .0135"-14'-4½"	ST 303
DIAGONAL FLAT	F8A	*	SEE REF. DRWG	ST 415
# 8 SHEAR ANCHOR	SA2	2	8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-3	1	3½"x 3½"x ⅜"x 3'-6⅞"	ST 298
	DUS-5	1	3½"x3½"x ⅜"x 3'-6⅛"	ST 299
	DUS-6	3	3½"x 3½"x ⅜"x 4'-4⅜"	ST 299
	DUS-7	1	3½"x 3½"x ⅜"x 4'-4⅞"	ST 299
MISC PLATES	PF-1	2	1'½"x 1'½" x 0'-4"	ST 400
	PF-3	5	3½" x 3'-0" x 0" 3"	ST 400
CONN ANGLE	C5	1	3 x 2' x 37" x 0-3	ST 413
ANGLE CLIP ⚠	C1	12	2"x1 1/2"x1/4"x 0'-6"	ST 400
	C2	8	2 1/2"x1 1/2"x1/4"x 0'-6"	ST 400
CORNER ANGLE ASSEMBLY	AA20	1	SEE REF DRWG	ST 405

NO	DATE	REVISION	BY
⚠	5-9-69	AS NOTED	O.D.C.

REF. DRWG.			
7-AB1-48	11-25-68	SA-124	1-6-69
7-AB1-47	11-25-68	7-AB4-14,14.1	10-15-68
7-AB1-46	11-25-68	7-AB4-15,16	7-22-68
7-AB2-2	7-22-68	7-AB4-17	7-22-68
7-AB2-9	7-22-68	7-AB4-23,25	7-22-68
7-AB3-70	11-25-68	7-AB4-29	1-3-69
7-AB3-75	11-25-68	7-AB4-39-41,43	7-22-68
7-AB4-3	10-15-68	7-AB4-42	10-15-68
		7-AB4-45	12-20-68





NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4"x1" FILLET WELDS
SEE SHEET FP-F5-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET.

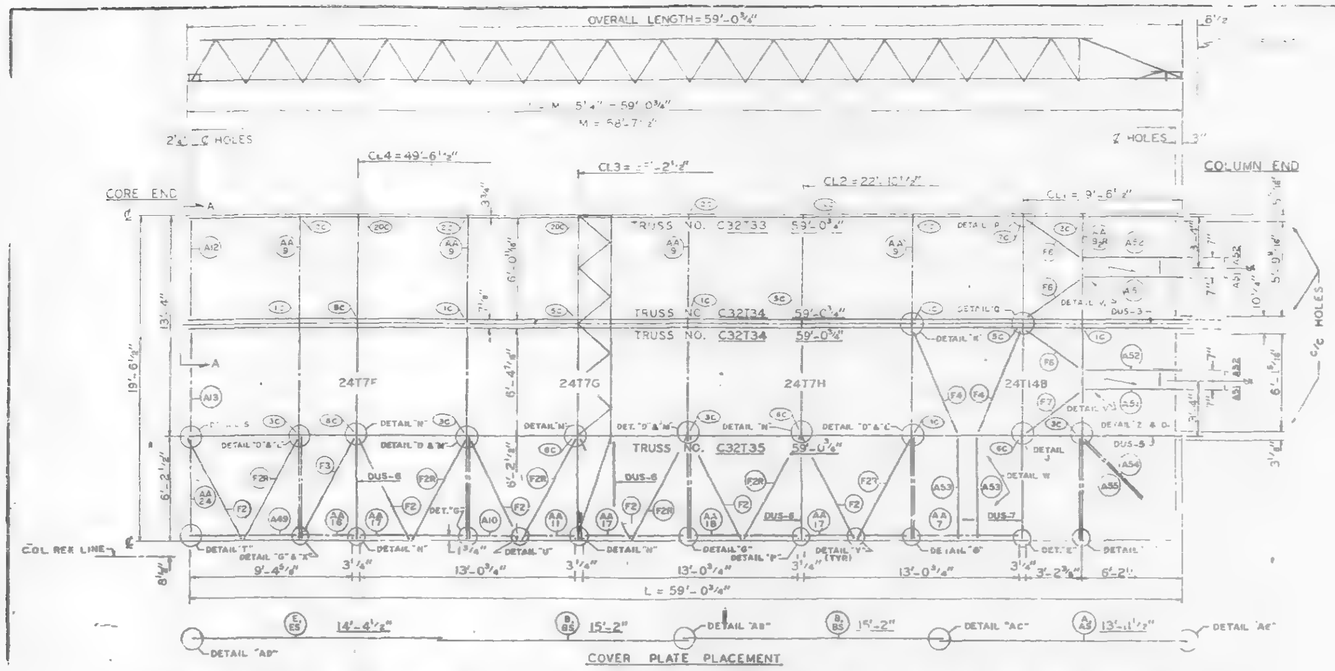
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

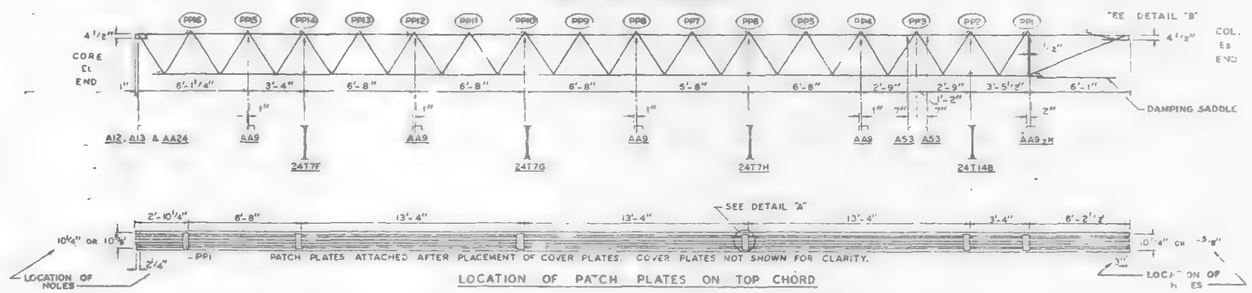
BLDG. A FLOORS 45 (NORTH & SOUTH) 46-49 (SOUTH) 79-83 (NORTH)

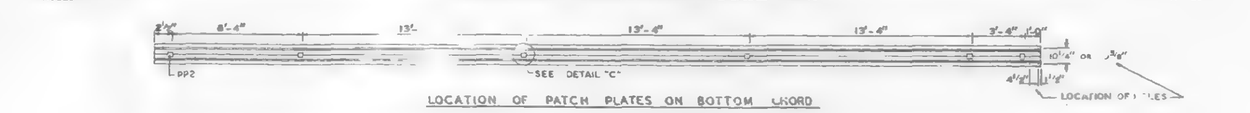
PANEL F5 19'-5" x 59'-0¾"

FABRICATION BY: LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-75	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A. BY:	DATE: 4/4/69	DRAWN BY: D.A. DATE: JAN. 17, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE:	CHECKED BY: T.R. OHURA DATE: JAN. 17, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY: A. CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F5

LACLEDE STEEL CO.

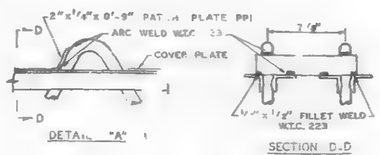






LOCATION OF PATCH PLATES ON TOP CHORD

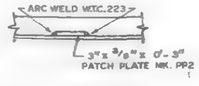
LOCATION OF PATCH PLATES ON BOTTOM CHORD



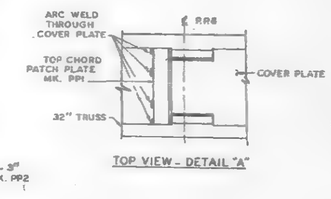
DETAIL "A"

SECTION D-D

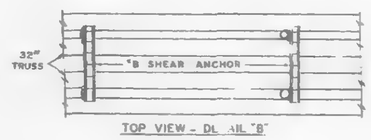
DETAIL "C"



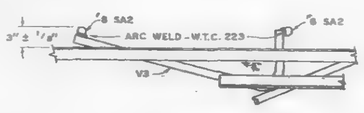
SECTION E-E



TOP VIEW - DETAIL "A"



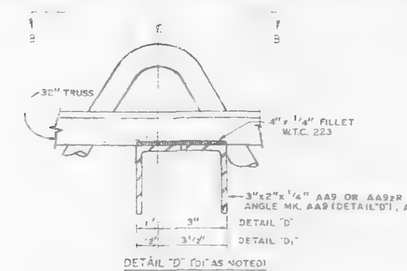
TOP VIEW - DETAIL "B"



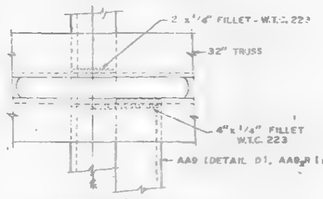
DETAIL "B"

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
SEE SHEET FP-F8-2 OR FP-F8-3 FOR DETAILS CALLED BUT NOT SHOWN ON THIS SHEET.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1/4" FILLET.
STEEL DECK NOT SHOWN ON DETAILS FOR CLARITY.

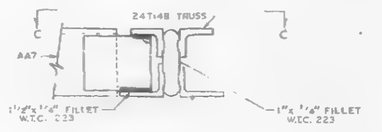
A = 1/4"
B = 1/4"



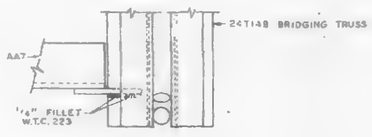
DETAIL "D" (DI AS NOTED)



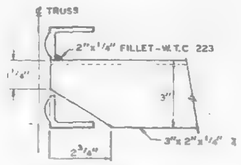
SECTION B-B
(SECT. FOR DETAIL D SHOWN)
(SECT. FOR D1 OPP. HAND)



DETAIL "E"



SECTION C-C



DETAIL "F"
END SUPPORT ANGLE ATTACHMENT

SECTION A-A
END SUPPORT ANGLE

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T33	1	C32T33 x 59'-0 3/4"	ST 233
	T34	2	C32T34 x 59'-0 3/4"	ST 234
	T35	1	C32T35 x 59'-0 3/4"	ST 235
BRIDGING TRUSSES	T7F	1	24T7F x 19'-6"	ST 207F
	T7G	1	24T7G x 19'-6"	ST 207G
	T7H	1	24T7H x 19'-6"	ST 207H
	T14B	1	24T14B x 19'-6"	ST 214B
3"x2"x 1/4" ANGLES	A10	1	3"x 2"x 1/4"x 2'-3 15/16"	ST 404
	A12	1	3"x 2"x 1/4"x 5'-11 1/16"	ST 404
	A13	1	3"x 2"x 1/4"x 6'-3 7/8"	ST 404
	A49	1	3"x2"x 1/4"x 8'-0 11/16"	ST 413
	A51	2	3"x2"x 1/4"x 8'-0"	ST 413
	A52	2	3"x 2"x 1/4"x 6'-0"	ST 413
	A53	2	3"x 2"x 1/4"x 5'-10"	ST 413
	A54	1	3"x 2"x 1/4"x 4'-0 1/2"	ST 413
	A55	1	3"x 2"x 1/4"x 4'-3"	ST 413
ANGLE ASSEMBLY	AA7	1	SEE REF. DRWG.	ST 404
	AA9	4	SEE REF. DRWG.	ST 404
	AA9zR	1	SEE REF. DRWG.	ST 404
	AA11	1	SEE REF. DRWG.	ST 404
	AA16	1	SEE REF. DRWG.	ST 404
	AA17	3	SEE REF. DRWG.	ST 404
	AA18	1	SEE REF. DRWG.	ST 404
	AA24	1	SEE REF. DRWG.	ST 412
DIAGONAL FLATS	F2	8	1 1/2" x 3/8" x 6'-10 1/2"	ST 402
	F2R	6	1 1/2" x 3/8" x 6'-10 1/2"	ST 402
	F3	1	1 1/2" x 3/8" x 8'-11 1/4"	ST 402
	F4	2	1 1/2" x 5/8" x 7'-0"	ST 402
	F6	3	1 1/2" x 5/8" x 6'-7"	ST 415
	F7	1	1 1/2" x 5/8" x 6'-9 3/16"	ST 415
PATCH PLATES	PP1	6	2" x 1/4" x 0'-9"	ST 400
	PP2	6	3" x 5/16" x 0'-3"	ST 400
COVER PLATES	A	1	9" x .0135" x 13'-11 1/2"	ST 303
	B	2	9" x .0135" x 15'-2"	ST 303
	E	1	9" x .0135" x 14'-6 1/2"	ST 303
	A8	1	3 1/2" x .0135" x 13'-11 1/2"	ST 303
	B8	2	3 1/2" x .0135" x 15'-2"	ST 303
	E8	1	3 1/2" x .0135" x 14'-6 1/2"	ST 303
ANGLE CLIPS	C1	8	2"x 1 1/2" x 1/4" x 0'-6"	ST 400
	C2	7	2 1/2" x 1 1/2" x 1/4" x 0'-6"	ST 400
	C5	1	3"x 2"x .37"x 0'-3"	ST 418
DAMPING SADDLE	DUS-3	1	3 1/2" x 3 1/2" x 3 5/8" x 3'-6 3/4"	ST 298
	DUS-5	1	3 1/2" x 3 1/2" x 3 5/8" x 3'-6 3/4"	ST 299
	DUS-6	3	3 1/2" x 3 1/2" x 3 5/8" x 4'-4 3/4"	ST 1259
	DUS-7	1	3 1/2 x 3 1/2" x 3 5/8" x 4'-4 3/4"	ST 299
MISC. PLATES	PF-1	2	1'-2"x 1'-2" x 0'-4"	ST 400
	PF-3	5	3 1/2" x 3 5/8" x 0'-5"	ST 400
	PF-12	2	6 1/2" x 1'-2" x 1'-0"	ST 416
	PF-13	2	1" x 1/8" x 1'-0"	ST 416
	PF-14	2	3" x 1/4" x 0'-7"	ST 416
	PF-15	2	1 1/2" x 1 1/2" x 0'-2"	ST 416
	PF-16	2	8 1/4" x 1 1/2" x 0'-2"	ST 416
	PF-17	2	2" x 1/4" x 3 1/2"	ST 416
	PF-18	3	2" x 1/4" x 1'-1 5/8"	ST 416
"B SHEAR ANCHOR	SA2	2	"B REBAR x 0'-9"	ST 400

LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 204 & CD 229, i.e. (1C)

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

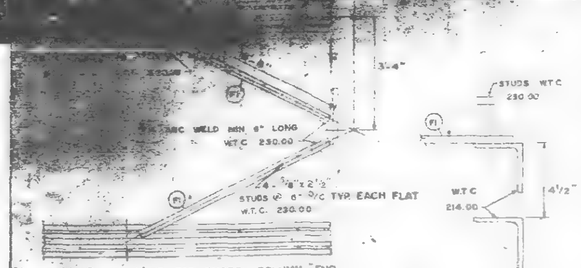
BLDG A FLOORS 44 (SOUTH)

PANEL FB 19'-6" x 59'-0 3/4"

FABRICATION BY: LACLEDE STEEL COMPANY

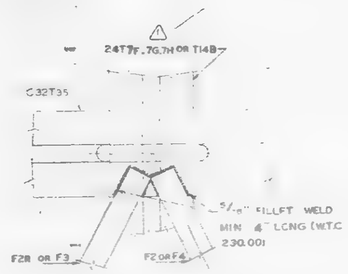
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-62	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A.	DATE 4/28/69	DRAWN BY: gdc DATE FEB. 7, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE FEB. 7, 1989	IN CHARGE OF PROD. DEV.
DETAILING STEEL WORKS		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F8

NO.	DATE	REVISION	BY
1	4-10-69	GENERAL	GDC



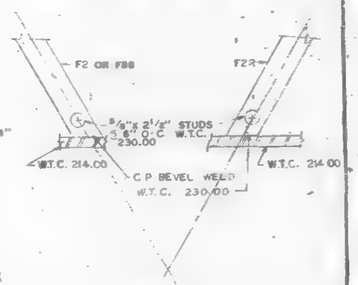
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING

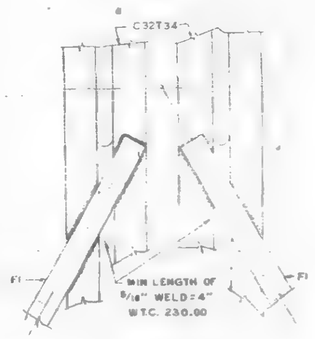


DETAIL "H" (OPP HAND FOR FR PANEL)

DETAIL "W" (OPP HAND FOR FR PANEL)

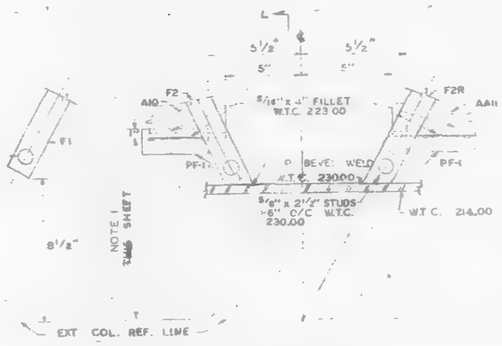


DETAIL "Q"

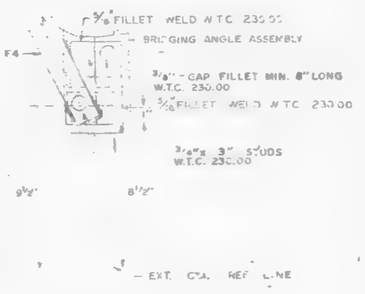


DETAIL "S"

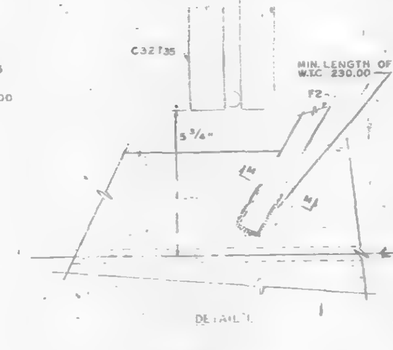
DETAIL "T"



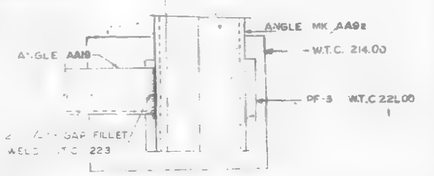
DETAIL "U"



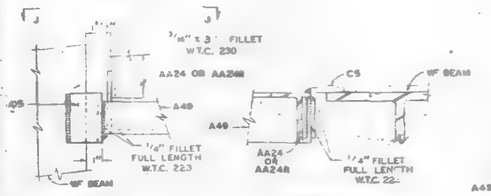
DETAIL "V"



DETAIL "T"



SECTION H-H (OPP. HAND FOR FR PANEL)

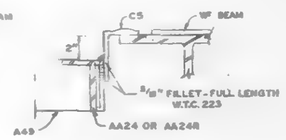


DETAIL "R"

WELDS NOT IDENTIFIED IN DETAIL R ARE IDENTIFIED IN SECTION J-J.

SECTION J-J

3"x3"x½" DECK BEAMS TOP ELEVATION SAME AS TOP ELEVATION OF W BEAM.



SECTION J-J

3"x3"x½" DECK BEAMS TOP ELEVATION BELOW TOP ELEVATION OF W BEAM.
(PANEL FR3 NORTH - COL. 443 - FLOOR 44 ONLY)

C32T35

SEE DETAIL "J"

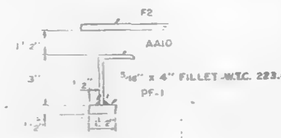
AA20 (PANEL F-5)
AA20R (PANEL FR-5)

SECTION M-M

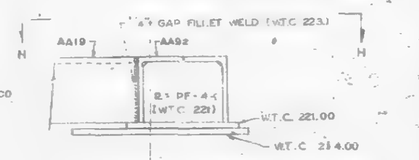
(SECT. M-M APPLIES TO PANEL FR3 - 44" FLOOR - NORTH COL. 443 - ONLY)

DETAIL "V"

DETAIL "J"

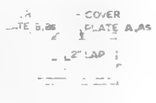


SECTION K-K



DETAIL "P" (OPP. HAND FOR FR PANEL)

DETAIL "M"



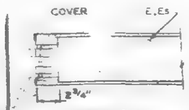
DETAIL "L"

COVER PLATES "Z9 S"

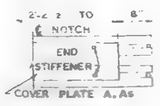
SEE DETAIL "V"

SECTION K-K

TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA20 (F3) AND AA20R (FR3-OPP HAND)



DETAIL "N"



DETAIL "K"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C 22300

NOTE

1. DIMENSION IS 10¾" FOR FLOORS 44 AND 15 8¼" FOR 78

NO	DATE	REVISION	G.D.C
1	4-9-69	AS NOTED	B"

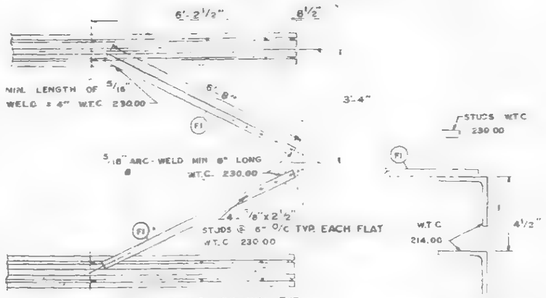
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

MISCELLANOUS FLOOR PANEL DETAILS FOR F3 & FR3 PANELS

FABRICATION BY LACLEDE STEEL COMPANY

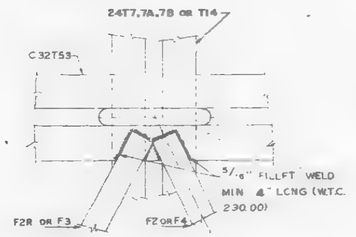
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-A83-75 & 76	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A. DATE 4/21/69	DRAWN BY: [illegible] DATE JAN. 20, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE	CHECKED BY: T.N. CHURA DATE JAN. 20 1969	IN CHARGE OF PROD. DEV.
DETAIL [illegible]	FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP - F3 - 2

℄ EXT. COL. REF. LINE

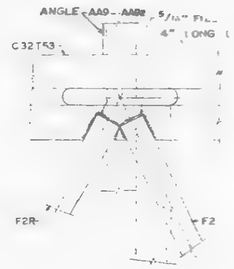


TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

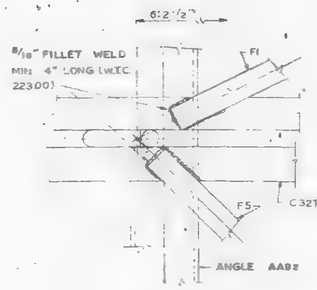
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING



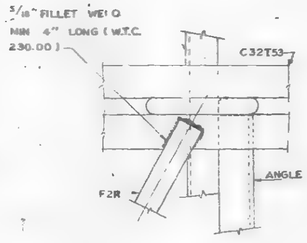
DETAIL "N" (OPP HAND FOR ■■■ PANEL)



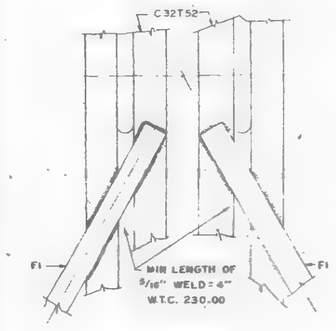
DETAIL "X" (OPP. HAND FOR FR PANEL)



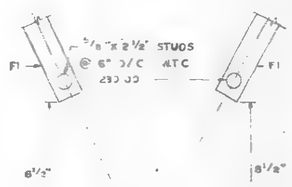
DETAIL "Z" (OPP. HAND FOR FR PANEL)



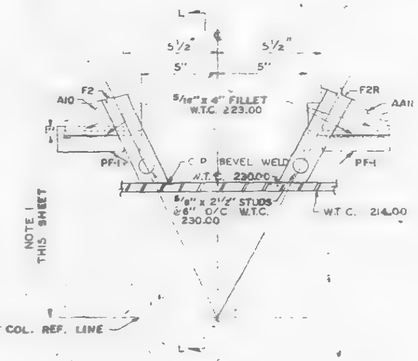
DETAIL "W" (OPP. HAND FOR FR PANEL)



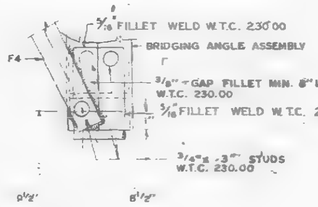
DETAIL "S"



DETAIL "T"

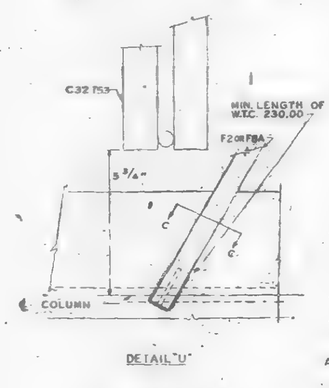


DETAIL "Q"

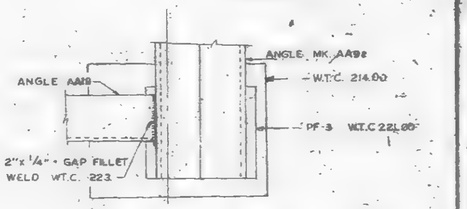


EXT. COL. REF. LINE

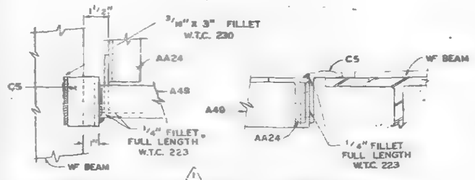
DETAIL "T"



DETAIL "U"



SECTION H-H (OPP. HAND FOR FR PANEL)

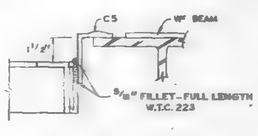


DETAIL "R" (OPP HAND FOR FR5)

WELDS NOT IDENTIFIED IN DETAIL B ARE IDENTIFIED IN SECTION J-J.

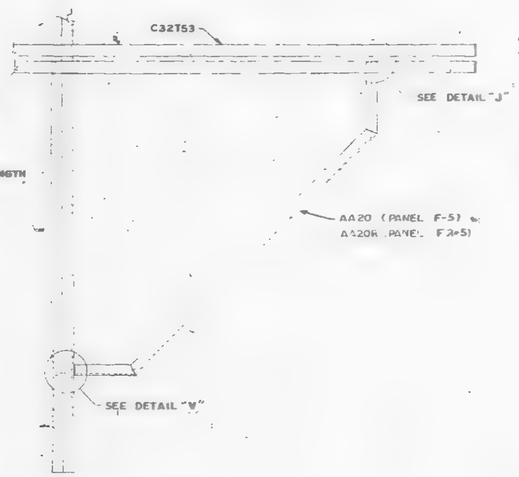
SECTION J-J

3"x2"x¼" DECK BEAMS TOP ELEVATION SAME AS TOP ELEVATION WF BEAM.

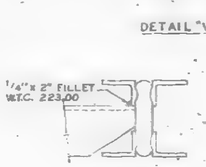


SECTION J-J

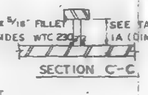
3"x2"x¼" DECK BEAMS TOP ELEVATION BELOW TOP ELEVATION WF BEAM.



TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA20 (F5) AND AA20R (FR5-OPP HAND)

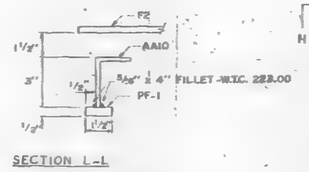


DETAIL "V"

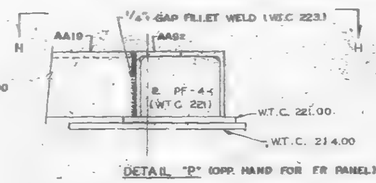


SECTION C-C

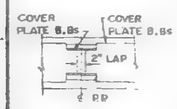
DETAIL "J"



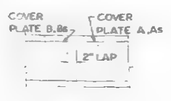
SECTION L-L



DETAIL "P" (OPP. HAND FOR FR PANEL)

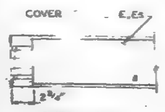


DETAIL "M"

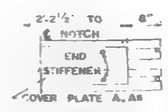


DETAIL "L"

COVER PLATES 29 GA. THICK



DETAIL "N"



DETAIL "K"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C 22300

SECTION K-K

TABLE "1A"				
	DIM "A" @ COL. LINE			
	417, 443	217, 243		
45	1 1/2"	0	0	0
45	1 1/2	1 1/2	1/2	1/2
47	1 1/2	1/2	1/2	1/2
48	1 1/2	1/2	1/2	1/2
49	0	0	0	0
79	0	1/2	0	0
80	1 1/2	1/2	1/2	1/2
81	1/2	1/2	1/2	1 1/2
82	1 1/2	1/2	1/2	1 1/2
83	0	0	0	0

PANEL F5 / ⚠ PANEL FR5

F2 USED WHEN DIM "A" = 0"
F8A " " " = 1 1/2"
F2R " " " = 0"
F8AR " " " = 1 1/2"

NOTE

1. DIMENSION IS 10 3/4" FOR FLOORS 45-49 (SOUTH) 45 (NORTH). AND IS 9 1/4" FOR 79-83 (NORTH).

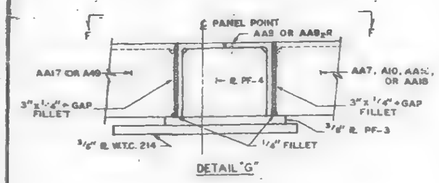
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

MISCELLANOUS FLOOR PANEL DETAILS FOR F5 & FR5 PANELS

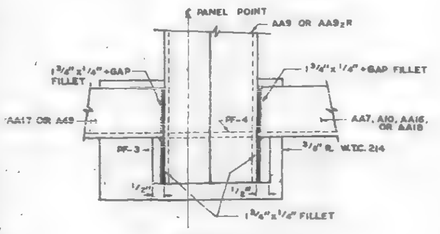
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-683-75 & 76	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A.	DATE 4/21/69	DRAWN BY DWB DATE JAN. 20, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.H. CHURA DATE JAN. 20, 1969	IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO. DETAILED BY: A. CARL WEBER		FABRICATION CONT. NO W.T.C. 221	SHEET NO. FP - F5-2

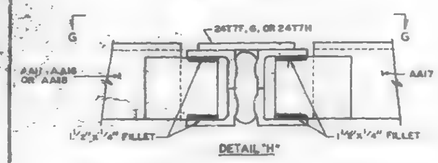
NO.	DATE	REVISION	BY
1	4-9-69	AS NOTED	G.D.C.



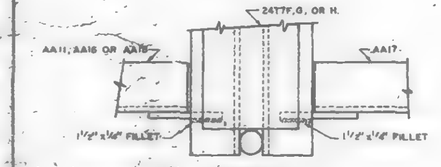
DETAIL "G"



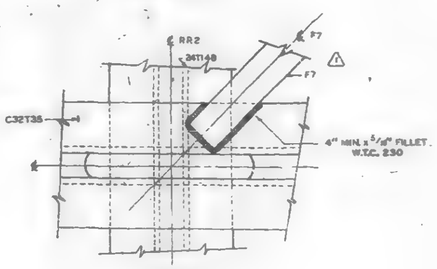
SECTION F-F



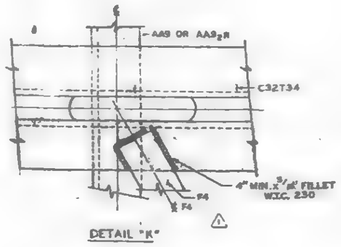
DETAIL "H"



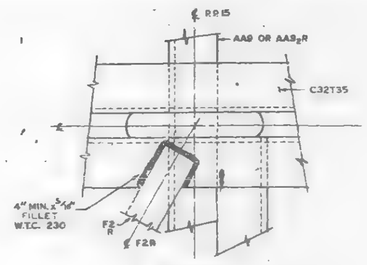
SECTION G-G



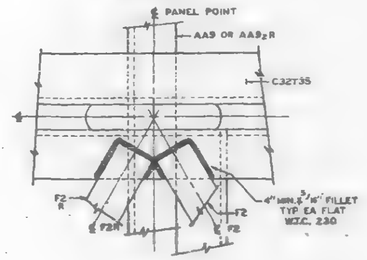
DETAIL "J"



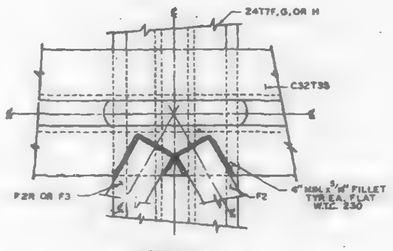
DETAIL "K"



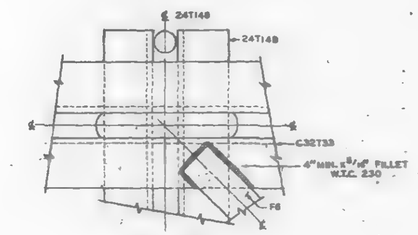
DETAIL "L"



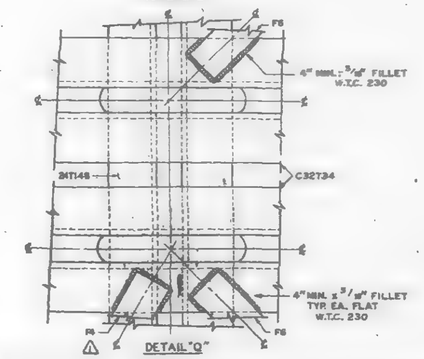
DETAIL "M"



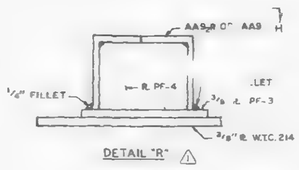
DETAIL "N"



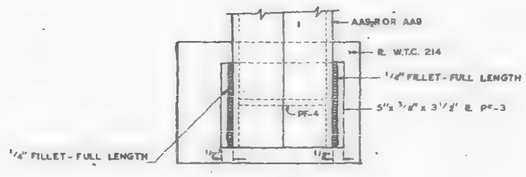
DETAIL "P"



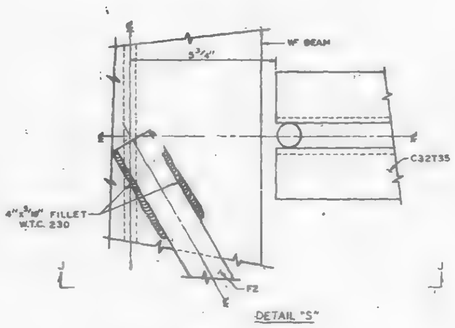
DETAIL "Q"



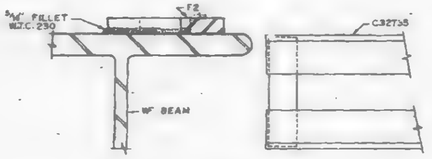
DETAIL "R" ⚠



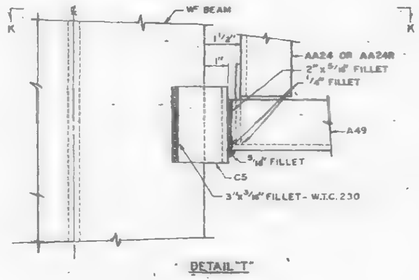
SECTION H-H ⚠



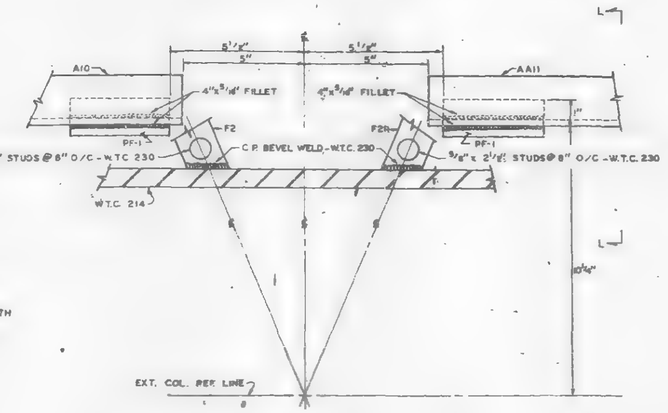
DETAIL "S"



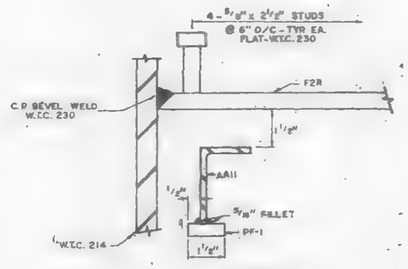
SECTION J-J



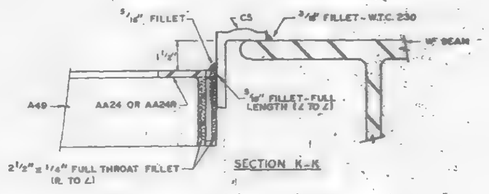
DETAIL "T"



DETAIL "U"



SECTION L-L



SECTION K-K

ALL DETAILS ON THIS SHEET ARE DRAWN FOR PANEL FB. ALL DETAILS MAY BE USED FOR PANEL FR8 IF USED OPPOSITE HAND.

UNLESS OTHERWISE NOTED ALL WELDS ARE TO BE MADE BY W.T.C. 223.

STEEL DECK NOT SHOWN ON DETAILS FOR CLARITY.

ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

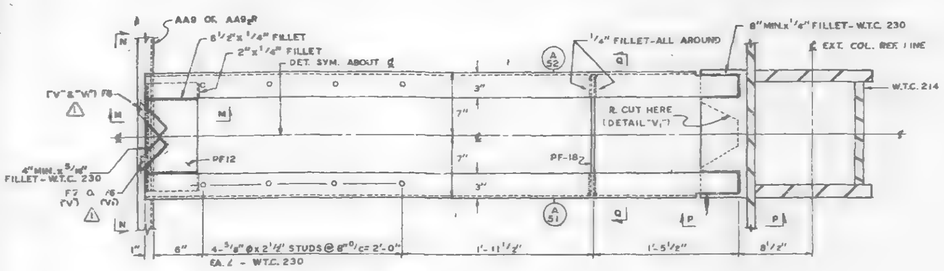
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

FLOOR PANEL DETAILS FOR PANELS FB & FR8

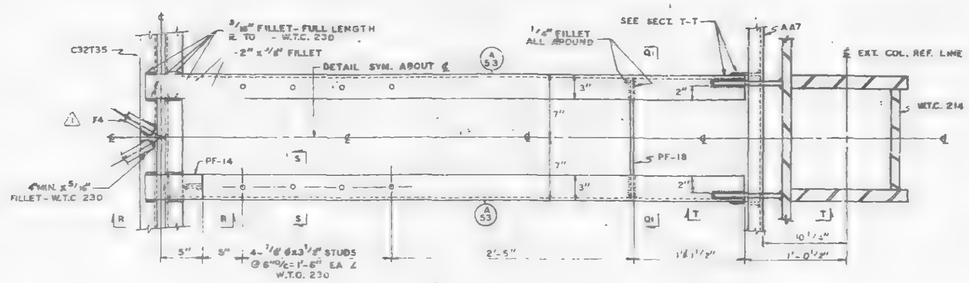
FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS			DESIGN DRAWING NO: 7-883-92 & 93	PLATE
APPROVED FOR FABRICATION BY: FOR P.D.N.Y.A.	DATE 4/24/69		DRAWN BY: DATE FEB. 7, 1968	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE		CHECKED BY: T.M.CHURA DATE FEB. 7, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY: [redacted] CO.			FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F8-2

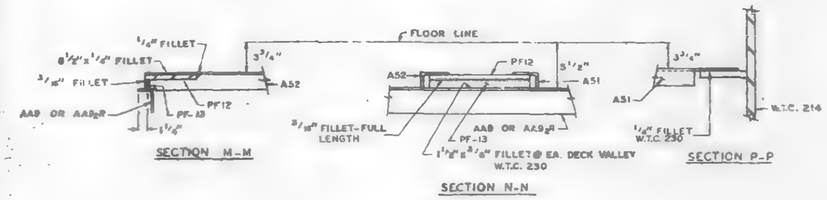
NO	DATE	REVISION	BY
⚠1	4-30-68	AS NOTED	G.D.C.



DETAIL "V" (OPP HAND FOR FR8)
(DETAIL "V1" AS NOTED)



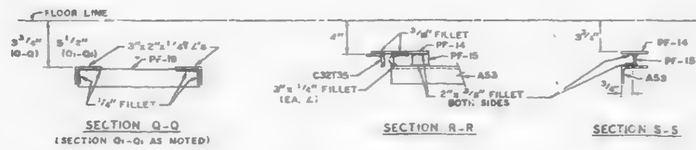
DETAIL "W"



SECTION M-M

SECTION N-N

SECTION P-P

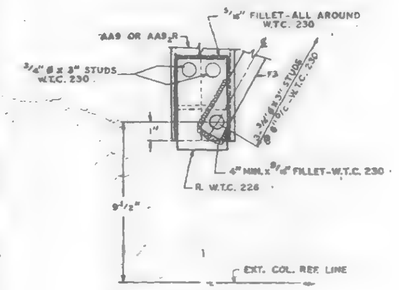


SECTION Q-Q
(SECTION Q1-Q1 AS NOTED)

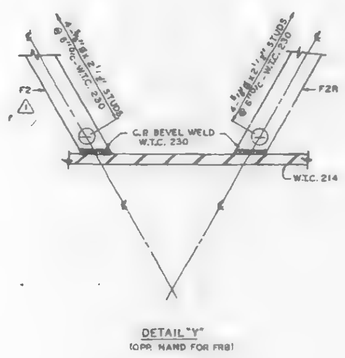
SECTION R-R

SECTION S-S

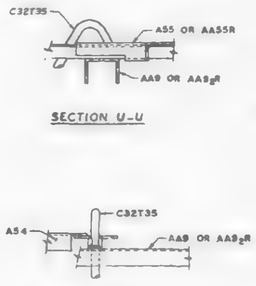
SECTION T-T



DETAIL "X"
(OPP HAND FOR FR8)

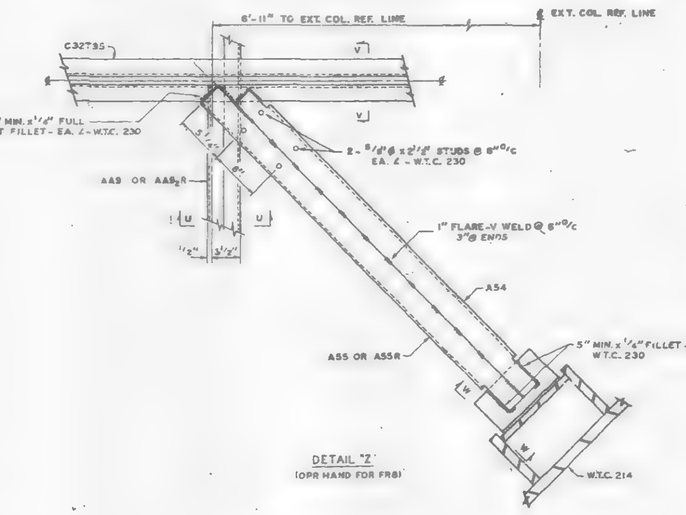


DETAIL "Y"
(OPP HAND FOR FR8)

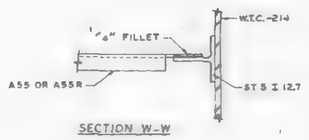


SECTION U-U

SECTION V-V



DETAIL "Z"
(OPP HAND FOR FR8)



SECTION W-W

DETAIL "AB"

DETAIL "AC"

DETAIL "AD"

DETAIL "AE"

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS OTHERWISE NOTED ALL ARC WELDS BY W.T.C. "23.
STEEL DECK NOT SHOWN ON DETAILS FOR CLARITY.

REF. DRGS.

7-AB3-62	-20-69	7-AB4-45.1	11-25-68
7-AB3-[illegible]	1-20-69	7-AB4-21	1-6-69
5A-124	1-6-69	7-AB4-22	1-6-69
7-AB1-30	1-6-69	7-AB4-22.1	7-22-69
7-AB1-31	1-6-69	7-AB4-23	7-22-69
7-AB1-48	1-6-69	7-AB4-24	10-15-69
7-AB2-18	1-6-69	7-AB4-26	7-22-69
7-AB2-9	1-8-69		
7-AB4-31.1	1-20-69		
7-AB4-34.1	1-20-69		
7-AB4-35.3	1-20-69		

NO.	DATE	REVISION	BY
1	4-10-69	AS NOTED	G.D.C.

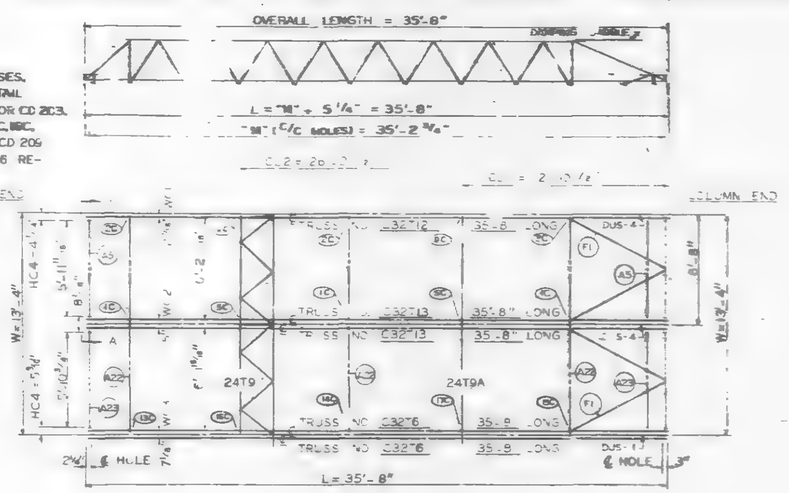
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
THE PORT OF NEW YORK AUTHORITY

FLOOR PANEL DETAILS FOR PANELS F8 & FR8.

FABRICATION BY: LACLEDE STEEL COMPANY
AT MADISON, ILLINOIS

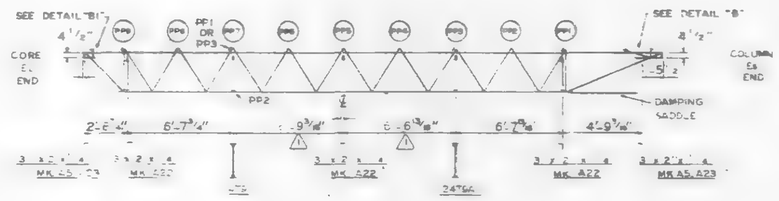
APPROVED FOR FABRICATION FOR P.O.N.Y.A.	DATE 4/15/69	DESIGN DRAWING NO. 7-AB3-62 & 63	PLATE
		DRAWN BY: gdc DATE FEB. 7, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE FEB. 7, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY LACLEDE STEEL CO.		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F8 3

LETTERS AND NUMBERS IN ELLIPSES, ie. (5C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 204, CD 202 OR CD 203. SPECIAL CONNECTIONS 13C, 14C, 15C, 16C, AND 17C ARE SHOWN ON SHEETS CD 209 CD 207, CD 205, CD 208, AND CD 206 RESPECTIVELY.

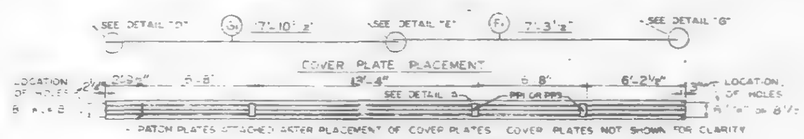


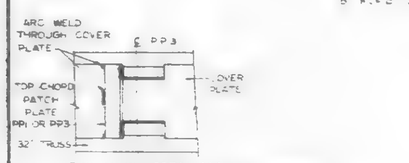
PANEL G1 SIZE 13'-4" x 35'-8"

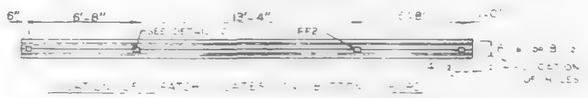
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

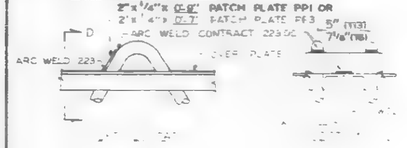


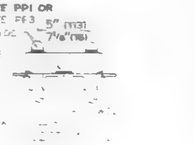
PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T6.
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T13.



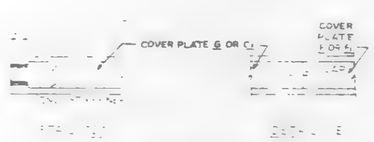


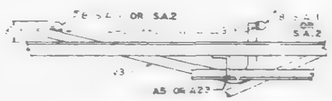


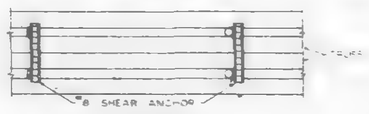




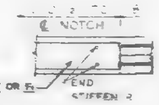
NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

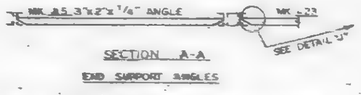


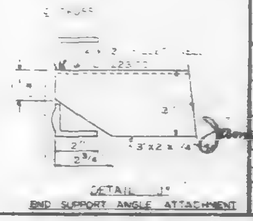




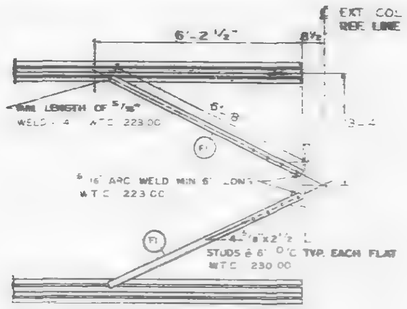
FIELD PLATE COVER PLATE OVER END STIFFENER W.T.C. 223.00

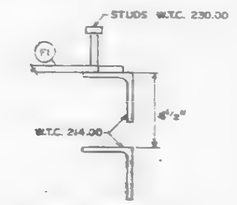






COVER PLATES MK. F1 & G1 TO BE USED WITH DOUBLE C32T13.
COVER PLATES MK. F & G TO BE USED WITH DOUBLE C32T6.
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T13.
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T6.





REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T9	2	C32T6 - [illegible]	ST 208
	T9A	1	C32T6 - [illegible]	ST 208
	T13	2	C32T13 - [illegible]	ST 208
BRIDGING TRUSSES	T9	1	24T9 - 13'-2 [illegible]	ST 208
	T9A	1	24T9 - 13'-2 3/4"	ST 208A
3"x2"x1/4" ANGLE	A5	3	3"x2"x1/4" x 13'-1 1/2"	ST 405
	A22	3	3"x2"x1/4" x 13'-3 1/2"	ST 405
	A23	3	3"x2"x1/4" x 6'-0 1/2"	ST 405
DIAGONAL FLAT	F	4	7" x 5/8" x 8'-8"	ST 402
PATCH PLATES	PP1	4	2" x 1/4" x 0'-8"	ST [illegible]
	PP2	8	2" x 1/4" x 0'-3"	ST [illegible]
	PP3	4	2" x 1/4" x 0'-7"	ST [illegible]
COVER PLATES	G	1	7" x 0.135" x 17'-10 1/2"	ST [illegible]
	F1	1	7" x 0.135" x 17'-3 1/2"	ST [illegible]
	G	1	8" x 0.105" x 17'-8 1/2"	ST [illegible]
	F	1	8" x 0.105" x 17'-3 1/2"	ST [illegible]
ANGLE CLIPS	C2	8	2 1/2" x 1 1/2" x 1/4" x 6"	ST [illegible]
	C1	2	2" x 1 1/2" x 1/4" x 6"	ST [illegible]
B SHEAR ANCHOR	SA1	3	B SHEAR x 6"	ST [illegible]
	SA2	3	B SHEAR x 0'-8"	ST [illegible]
DAMPING SADDLE	DUS-4	1	3 1/2" x 3 1/2" x 3 1/8" x [illegible]	ST [illegible]
	DUS-1	1	3 1/2" x 3 1/2" x [illegible]	ST [illegible]
CONNECTION PLATES				
SPECIAL CONNECTION UNITS	13C	1	SEE REF. DRWG.	ST 274
	14C	1	SEE REF. DRWG.	ST 272
	15C	1	SEE REF. DRWG.	ST 270
	16C	1	SEE REF. DRWG.	ST 273
	17C	1	SEE REF. DRWG.	ST [illegible]

NO.	DATE	REVISION	BY
1	2-24-69	AS NOTED	A.C.

REF. DRWG.

7-AB4-3 & 31	1-3-68
7-AB4-15 & 16	3-3-66
7-AB4-39-41	1-3-68
SA-24	10-20-67
7-AB3-7	1-3-68
7-AB1-6 & 12	5-10-66
7-AB2-6	2-15-68
7-AB4-42	4-1-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

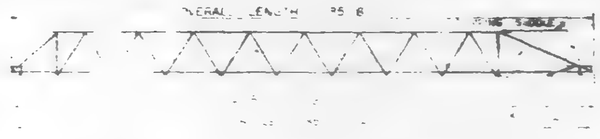
SLABS AT FLOORS 10-24, 26-40, 50-58, 60-66, 68-74, 84-91 & 93-106 (EAST & WEST) PANEL G1 - 13'-4" x 35'-8"
45-49 (WEST) 80-83 (EAST)

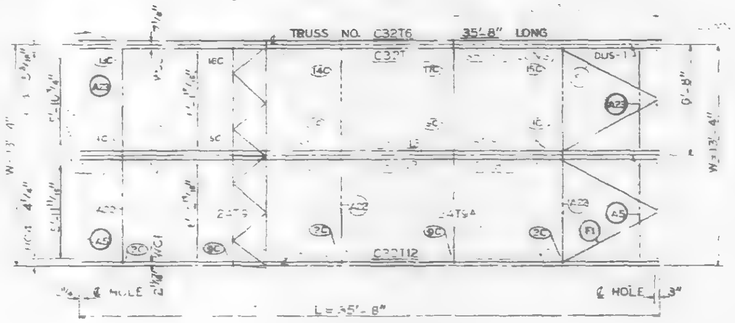
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-AB3-15 5-9-68 PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.	DATE 5/22/69 DRAWN BY [illegible] DATE APRIL 10, 1968
APPROVED FOR FABRICATION BY FOR	DATE CHECKED BY [illegible] DATE APRIL 10, 1968
DETAILED BY A.C. WEBER	FABRICATION CONT. NO. WT'G. 221 SHEET NO. FP-G1

LACLEDE STEEL CO

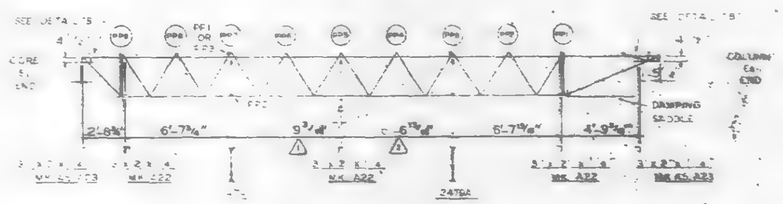
LETTERS AND NUMBERS IN ELLIPSES, ex. (1E), INDICATE CONNECTION DETAIL SHOWN ON SHEET [illegible]. SPECIAL CONNECTIONS 13C, 14C, 15C, 16C, AND 17C ARE SHOWN ON SHEETS CD 206, CD 207, CD 205, CD 208, AND CD 206 RESPECTIVELY.



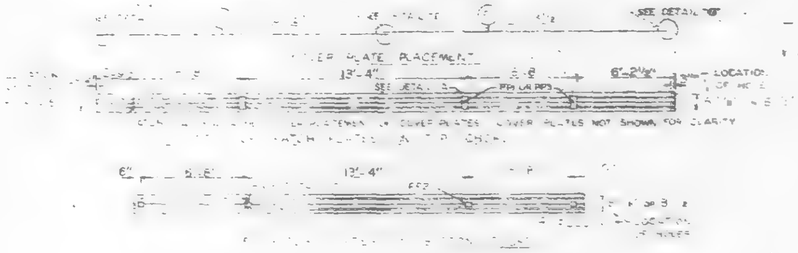


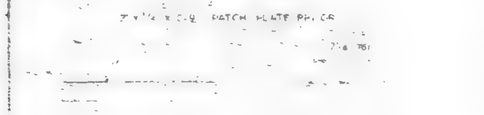
℄ & DIMENSIONS ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH ℄ NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

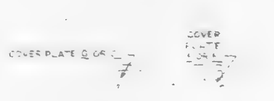
PANEL G1 SIZE - 13'-4" x 35'-8"

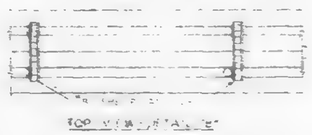


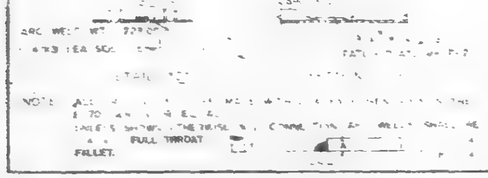
PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T6.
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T13.

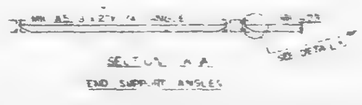




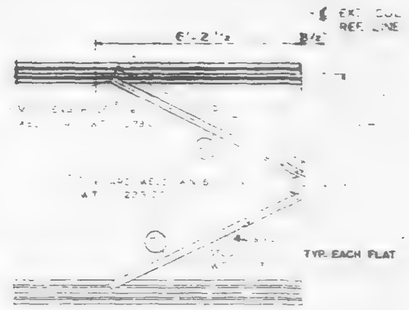








COVER PLATES MK. F1 & G1 TO BE USED WITH DOUBLE C32T13.
COVER PLATES MK. F & G TO BE USED WITH DOUBLE C32T6.
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T13.
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T6.



REQUIRED MATERIAL PER PANEL				
MATERIAL	MK.	PCS.	SIZE	DETAIL
FLOOR TRUSSES	T6	2	C32T6 - 35'-8"	ST 206
	T12	1	C32T12 - 35'-8"	ST 206
	T13	2	C32T13 - 35'-8"	ST 206
END TRUSSES	T9	1	24T9 - 13'-0 7/16"	ST 208
	T9A	1	24T9A - 13'-2 3/4"	ST 208A
	A5	2	3"x2½"x ¼ x 6'-1 15/16"	403
	A22	1	3"x2½" x ¼ x 13'-3 1/2"	ST 405
	A23	2	3"x2½" x ¼ x 6'-2 3/4"	ST 405
	F	4	¼" x 6'-8"	ST 402
	FP1	4	¼" x 1'-8" x 0'-9"	ST 400
	FP3	8	¾" x 1'-8" x 0'-3"	ST 400
PATCH PLATES	PP3	4	¾" x 1'-4" x 0'-7"	ST 400
			0.045" x 7'-0"	ST 303
	F1	1	9" x 0.035" x 13'-3"	ST 303
	G	1	9" x 0.035" x 17'-10 7/8"	ST 303
	F	1	9" x 0.035" x 17'-3 1/2"	ST 303
ANGLES	A5	2	3" x 2½" x ¼ x 6'-1 15/16"	ST 400
	G1	2	2" x 1½" x ¼" x 6"	ST 400
SHEAR ANCHOR	SA1	3	⅞" REBAR x 0'-7"	ST 400
	SA2	3	⅞" REBAR x 0'-8"	ST 400
DRAPING SADDLE	DUS-4	1	3" x 3" x 3'-0" x ¼" x 8"	ST 298
	DUS-1	1	3 11/16" x 3 11/16" x 3 11/16" x 3'-4"	ST 298
CONNECTION PLATES				
SPECIAL CONNECTION UNITS	13C	1	SEE REF. DRWG.	ST 274
	14C	1	SEE REF. DRWG.	ST 272
	15C	1	SEE REF. DRWG.	ST 270
	16C	1	SEE REF. DRWG.	ST 273
	17C	1	SEE REF. DRWG.	ST 271

NO.	DATE	REVISION
1	2-21-69	AS NOTED

3-68
5-8-68
3-68
10-20-67
3-68
5-10-68
4-1-68
4-1-68

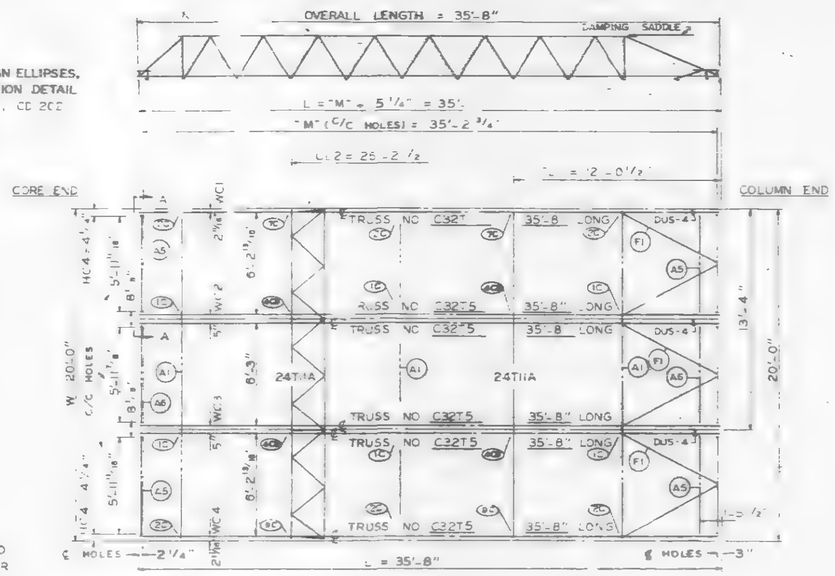
68-74, 84-91 &
93-107 (EAST & WEST) PANEL G1 13'-4" x 35'-8"
79-83 (WEST) 46-49 (EAST)

DRAWN W.S. DATE 4-1-68
TRACED [illegible] DATE 4-1-68
CHECKED [illegible] DATE 4-1-68
APPROVED [illegible] DATE 5-10-68
DESIGN [illegible] DATE 4-1-68
QUANTITIES [illegible] DATE 4-1-68

LACLEDE STEEL CO.

SHEET NO. FP-GR1

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201, CD 202 OR CD 203.



PANEL NO HI SIZE 20'-0" x 35'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN ELECTRODES OF THE E 70 SERIES OR EQUAL UNLESS SHOWN OTHERWISE. ALL CONNECTION ARC WELDS SHALL BE 4" x 8" FULL THROAT FILLET

FEED PLATE COVER PLATE KEEP END STIFFENER WTC 223.00

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	6	C32T5 - 35'-8"	SEE
BRIDGING TRUSSES	T11A	2	[illegible] 19'-11"	ST-4
3"x2"x1/4" ANGLE	A1	3	3"x2"x1/4" x 19'-11"	ST-403
	A5	4	3"x2"x1/4" x 5'-11 13/16"	ST 403
	A6	2	3"x2"x1/4" x 6'-2"	ST 403
DIAGONAL FLATS	F1	6	2" x 5" x 6'-8"	ST 402
PATCH PLATES	PP3	1	2"x1'-4"x0'-7"	ST 400
	PP2	12	3"x3"x0'-3"	ST 400
COVER PLATES	G1	3	7"x0.135"x17'-10 1/2"	ST 208
	F1	3	7"x0.135"x17'-3 1/2"	ST 208
ANGLE CLIPS	C2	12	5"x4"x1/2"x3 1/4" x 4"	ST 400
⌀ SHEAR ANCHOR	SA1	9	⌀ REBAR x 0'-7"	ST 400
DAMPING SADDLE (1)	DUS-4	3	3 1/2"x3 1/2"x3/8"x3'-6"	ST298
CONNECTION BAR	CB1	2	1" ⌀ x 1'-3"	ST 400
CONNECTION PLATES (1)	P1	3	3"/8" x 3/8" x 0'-6 1/2"	ST 400
	P2	2	4"/8" x .38" x 0'-9"	ST 400
	P7	2	6"/8" x 3"/2" x 1'-0"	ST 401

NO	DATE	REVISION	BY
2	2-21-69	AS NOTED	G.D.C.
1	10-16-68	MATERIAL LIST	G.D.C.

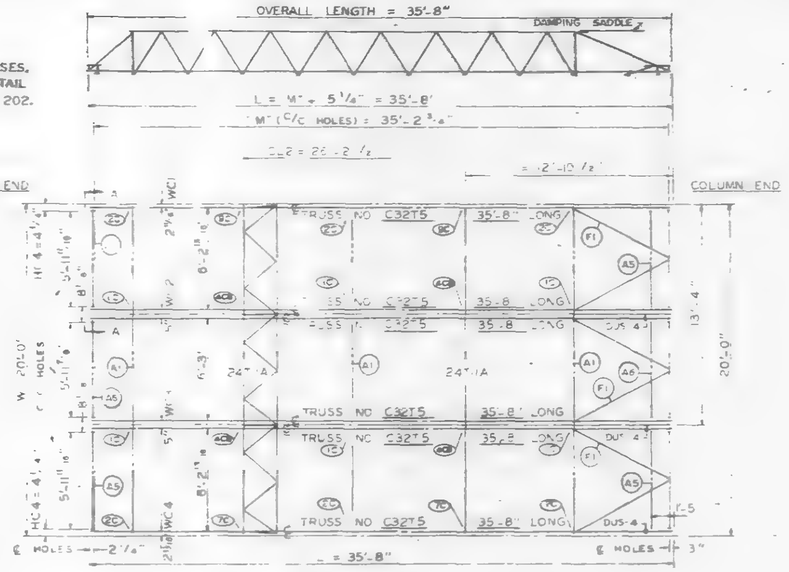
REF DRAG
- 7 484 3 & 31 1-3-68
- 7 484 5 & 6 5-8-68
- 7 484 39-41 1-3-68
- 5A 24 10 20-68
- 7 483 1 1-3-68
- 7 48[illegible] & [illegible] 5-10-68
- 7 48[illegible] 2-15-68
- 2A4 42 4-68

[illegible] FOR PANEL DETAILS
AT
ACME FREIGHT CENTER [illegible]
IN
THE CITY OF NEW YORK, AUTHORITY

DESIGN [illegible] FOR 24,25,42 EL 58, 80,81,82 TO 84,34 & 35
93-105 (EAST & WEST) PANEL HI [illegible] x 35'-8
45-49 (WEST) 80-83 (EAST)

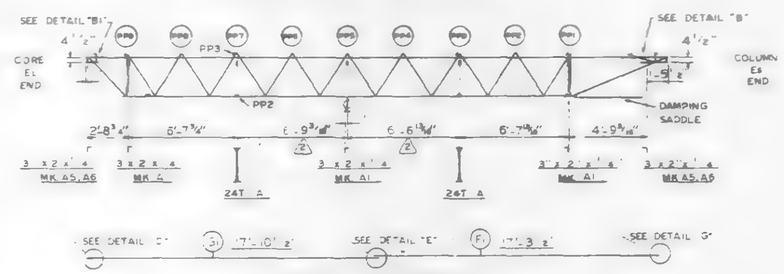
FABRICATION BY ACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7 483-17 E-10-68 PLATE
APPROVED FOR FABRICATION FOR PONYA — DATE 2/28/69
DRAWN BY B.B. DATE APRIL 10, 1968
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR — DATE
CHECKED BY T.M.CHIRA DATE APR [illegible] 1968
DETAILED BY [illegible]
FABRICATION CONT NO A-C 221
SHEET NO FP-HI

LETTERS AND NUMBERS IN ELLIPSES, ie (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.

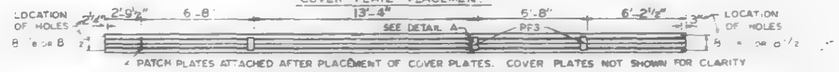


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. HR1 SIZE 20'-0" x 35'-8"

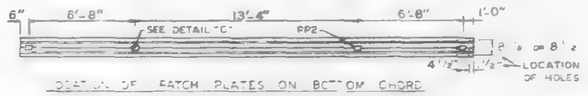


COVER PLATE PLACEMENT

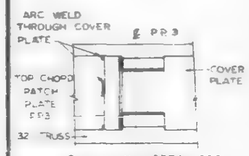


* PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

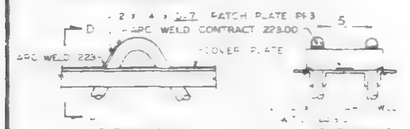
LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD



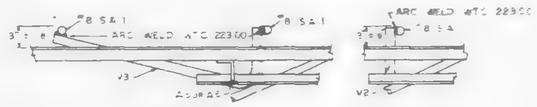
DETAIL "A"



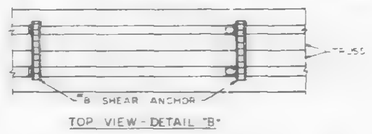
DETAIL "A"

DETAIL "D" DETAIL "E"

USE PLATES 29 GA THICK



DETAIL "B" DETAIL "B"

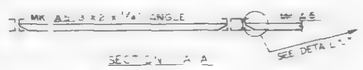


TOP VIEW - DETAIL "B"

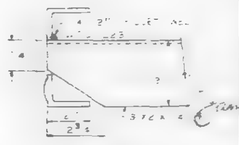
DETAIL "F" SECTION E-E

ALL ARC WELDS TO BE MADE WITH E-70 SERIES OR EQUAL UNLESS SHOWN OTHERWISE A 4 x FULL THROAT FILLET

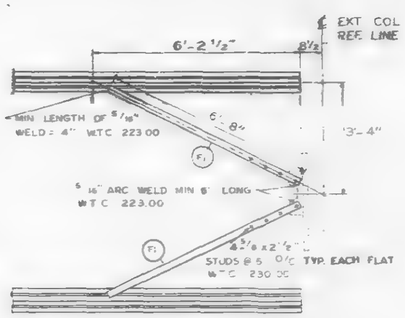
DETAIL "G"



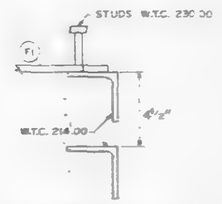
SECTION A-A
END SUPPORT ANGLES



DETAIL "H"
END SUPPORT ANGLE ATTACHMENT



TYPICAL PLAN OF TOP CHORD AT END DIAGONAL TRUSS BRACES WELDED OVER DECK BY WTC 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-8" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF ORDER
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	6	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T1A	2	2T1A 19'-11"	BT21A
3"x 2"x 1/4" ANGLE	A1	3	3 x 2" x 1'-4" x 10'-11"	ST 400
	A4	4	3"x 2" x 1'-4" x 6'-1 15/16"	ST 403
	A6	2	3"x 2" x 1'-4" 2"	ST 403
DIAGONAL FLATS	F1	6	1 2"x 5 .8"	ST 402
PATCH PLATES	PP3	12	x 4 x 0'-7"	ST 400
	PP2	12	3 x 3 3/8" x 0'-3"	ST 400
COVER PLATES	G1		7" x 0.135" x 7'-10"	ST 303
	F1	3	7" x 0.135" x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	2	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
"B SHEAR ANCHOR	SA1	3	"B REBAR x 0'-7"	ST 400
DAMPING SADDLE	DUS-4	3	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
		1		
CONNECTION BAR	CB1	2	1" ● x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	2	4 1/2" x .38" x 0'-8"	ST 400
⚠1	P7	2	6 1/2" x 1/2" x 1'-0"	ST 401

NO	DATE	REVISION	BY
⚠2	2-21-69	AS NOTED	B.D.C.
⚠1	10-16-68	LIST OF MATERIAL	B.D.C.

REF DRWG

7-AB4-3 & 31	1-3-68
7-AB4-5 & 16	5-8-68
AB4 39 &	3-68
SA-24	10-20-67
-53 &	1-3-68
-8 &	5 10-68
AB4 6	2 15 68
AB4 42	4- 68

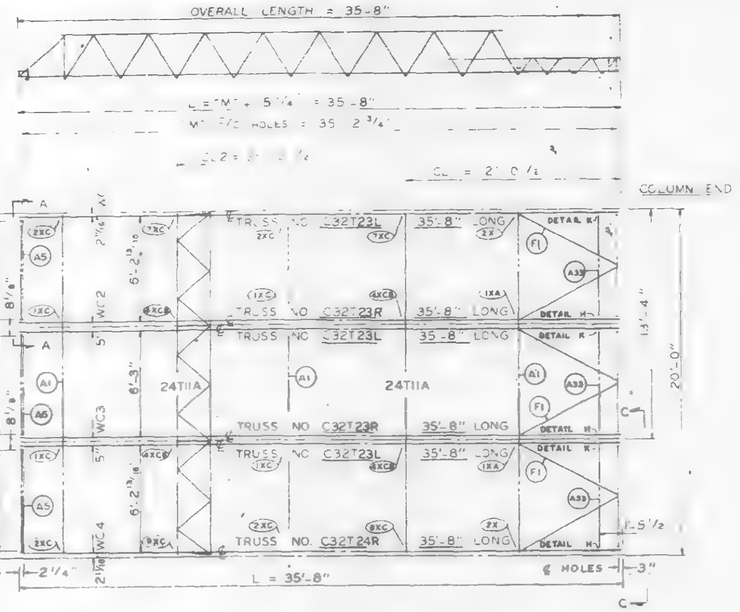
[illegible] TRUSS CO. [illegible]
[illegible] TRUSS PLANT
[illegible]
THE PRINT OF NEW YORK AUTHORITY

BUILDING FLOORS 18, 24, 25, 40 EAST & WEST 46-4, 50-58, 60-66, 68, 74 (EAST) PANEL HR1 - 20'-0" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY

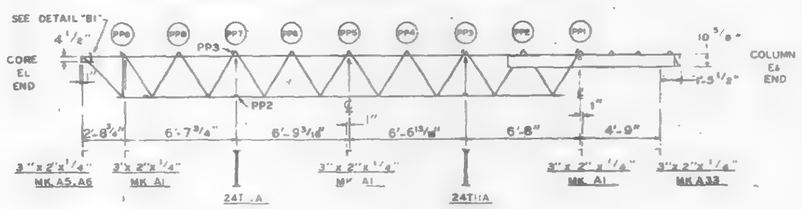
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-18 5-10-68	PLATE
APPROVED FOR FABRICATION FOR OWNER	DATE 4/28/69	DRAWN BY [illegible] DATE APR 28 68	
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR	DATE	CHECKED BY T.W. SHURE DATE APR 28 69	
DETAILED BY [illegible]		FABRICATION CONT NO W.T.C. 221	SHEET NO. FP-HR1

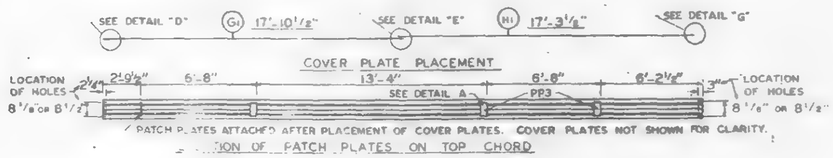
LETTERS AND NUMBERS IN ELLIPSES, (A1) (F1) INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 210 — CD 228.



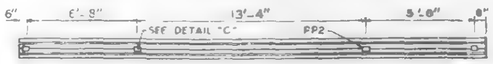
DIMENSION HC4 ARE RELATED TO [illegible] PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ IN THE COLUMN CLIPS & BRACES.

PANEL NO. H2 SIZE 20'-0" x 35'-8"

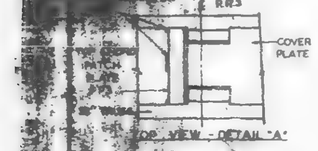


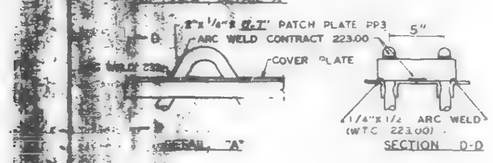


LOCATION OF PATCH PLATES ON TOP CHORD



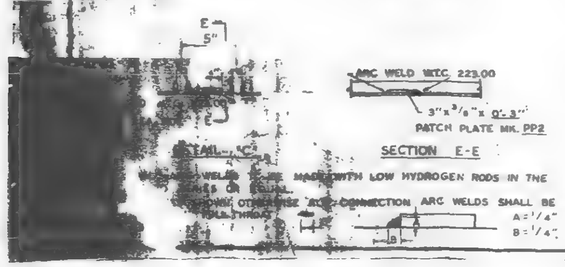
LOCATION OF PATCH PLATES ON BOTTOM CHORD



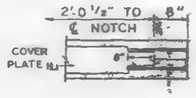


DETAIL "D" DETAIL "E"

COVER PLATES 29 GA. THICK



FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00



DETAIL "G"

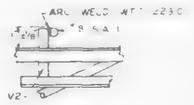
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
TRUSSES	T23L	3	C32T23L 35'-8"	ST 223L
	T23R	2	C32T23R - 35'-8"	ST 223L
	T24R	1	C32T24R - 35'-8"	ST 224L
BRACING TO SEE	A	2	24T...A 19'-11"	ST 21A
STRUCT. STEEL ANGLES	A	3	3"x2"x 4"x19"	ST 403
	A5	2	3"x2"x 4"x 6'-1 3/8"	ST 403
	A6	1	3"x2"x 4"x 6'-2"	ST 403
	A33	3	3"x2"x 4"x 5'-10 1/2"	ST 410
PATCH PLATES	PP3	12	2"x 4"x 0'-7"	ST 400
	PP2	2	3"x 3 3/8"x 0'-3"	ST 400
TOWER PLATES	J	3	7"x 0.135"x 17'-10"	ST 303
	H	3	7"x 0.135"x 17'-3"	ST 303
ANGLE CLIPS		12	2 1/2" x 1'-2" x 3/4" x 6"	ST 400
3/8" SHEAR [illegible]		3	3/8" REBAR x 0'-7"	ST 400
DIAGONAL FLATS	F1	8	1 1/2" x 5/8" x 6'-8"	ST 402
[illegible] BAR	CB	3	1" D x 1'-3"	ST 400
CONNECTION PLATES	P	2	3" 2" x 3/8" x 0'-6 1/2"	ST 400
	P2	2	4 1/2" x .39" x 0'-9"	ST 400
	P7	2	6 1/2" x .50" x 1'-0"	ST 401
CLOSURE PLATE	PF11	3	3"x 4"x 0'-2 3/8"	ST 412

DETAIL "K" END SUPPORT ANGLE ATTACHMENT

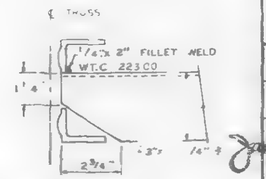
DETAIL "H" END SUPPORT ANGLE ATTACHMENT

SECTION C-C
END SUPPORT ANGLE



DETAIL "B"

SECTION A-A
END SUPPORTS



NO.	DATE	REVISION	BY

REF. DRWG.		
	7-AB4-13	10-5-68
	7-AB4-15 & 16	7-22-68
	7-AB4-152	10-4-68
	SA-6	10-21-68
	7-AB3-38	10-4-68
	AB1-22	10-4-68
	7-AB2-6	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

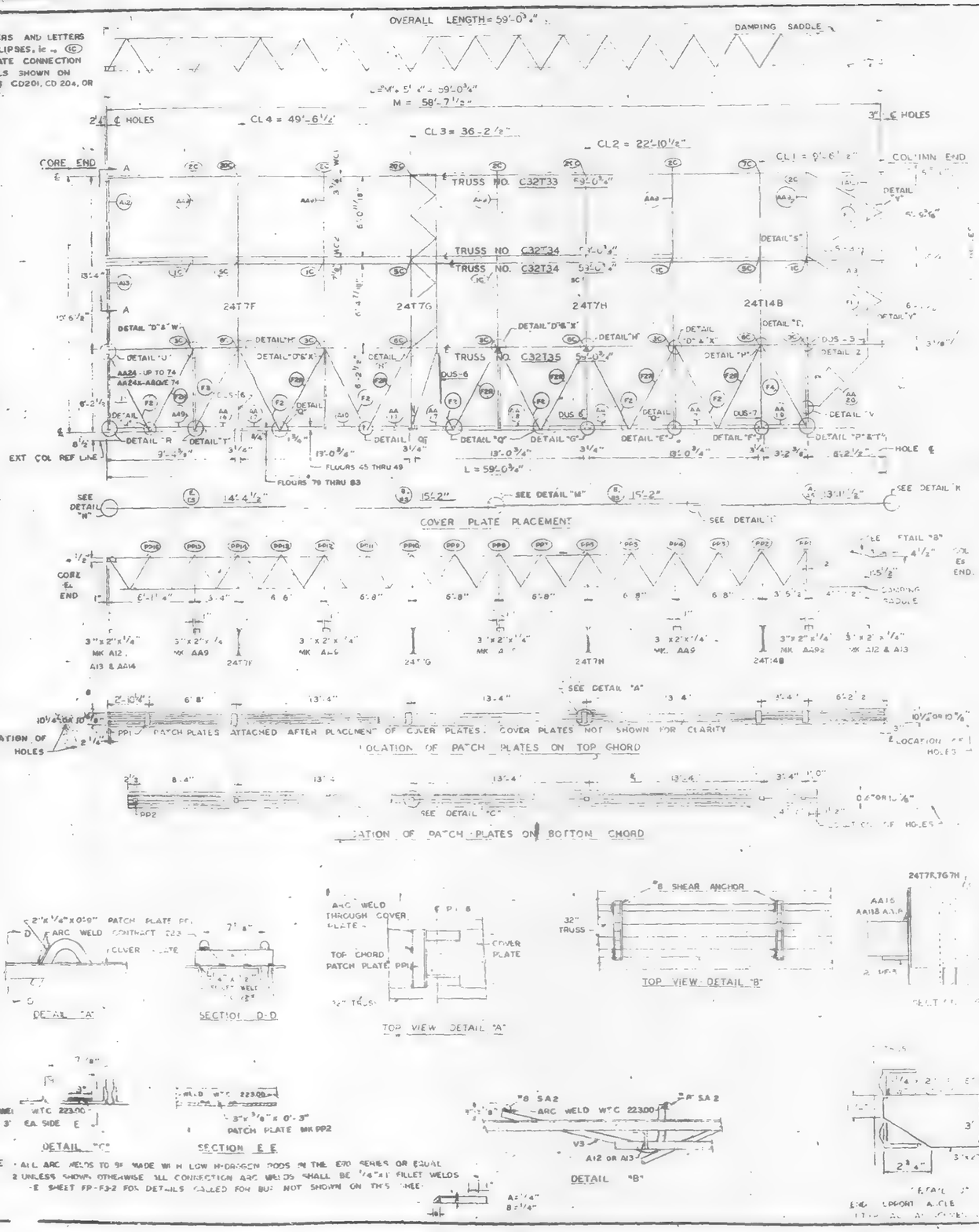
BLDG 8 FLOORS 25, 59, 92, (NORTH & SOUTH)

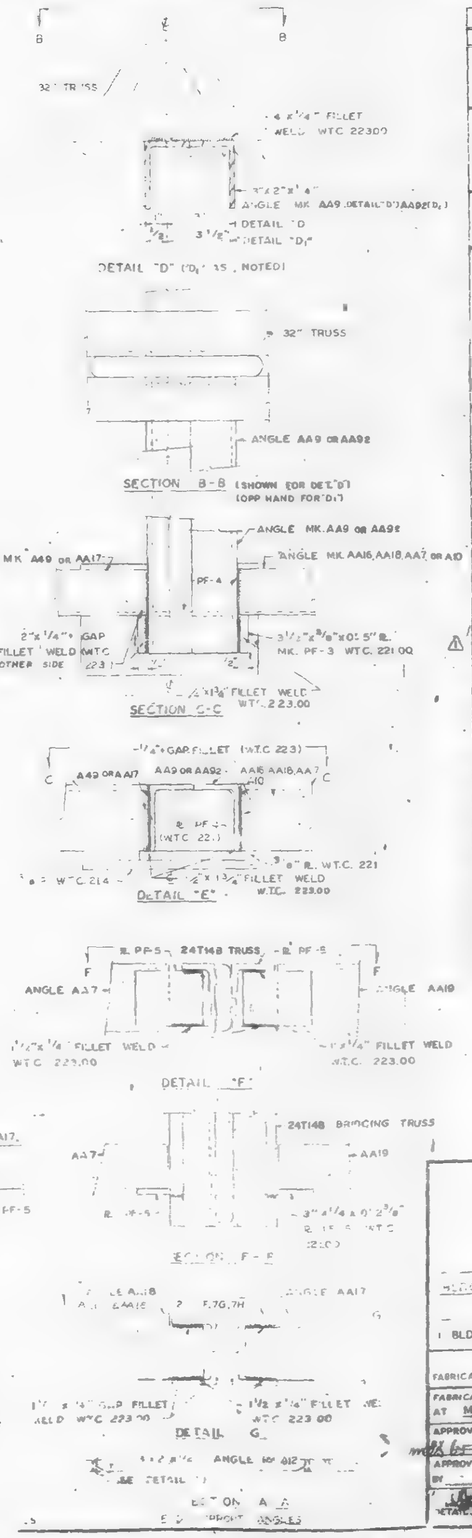
PANEL H2 - 20'-0" x 35'-8"

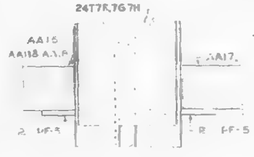
FABRICATION BY LACLEDE STEEL COMPANY		
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-38 PLATE
APPROVED FOR FABRICATION FOR PONYA	DATE 7/10/69	DRAWN BY [illegible] DATE JULY 2, 1969
APPROVED FOR FABRICATION BY ___ FOR FABRICATOR	DATE	CHECKED BY T.M. CHUBA DATE JULY 3, 1969
DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221 SHEET FP-H2

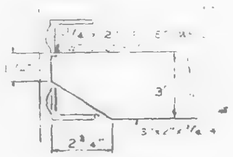
LACLEDE STEEL CO.

NUMBERS AND LETTERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD201, CD 204, OR CD 229.









NOTE - ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL
2 UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" FILLET WELDS
- SEE SHEET FP-F3-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS	SIZE	DRWG
FLOOR TRUSSES	T33	1	C32T33 - 59'-0 3/4"	ST 233
	T34	2	C32T34 - 59'-0 3/4"	ST 234
	T35	1	C32T35 - 59'-0 3/4"	ST 235
BRIDGING TRUSSES	T7F	1	24T7F - 19'-6"	ST 207F
	T7G	1	24T7G - 19'-6"	ST 207G
	T7H	1	24T7H - 19'-6"	ST 207H
	T14B	1	24T14B - 19'-6"	ST 214B
3" x 2" x 1/8" ANGLES	A1/3	1	3" x 2" x 1/8" x 2'-7 15/16"	ST 404
	A12	2	3" x 2" x 1/8" x 5'-11"	ST 404
	A13	2	3" x 2" x 1/8" x 3'-1"	ST 404
	AA9	1	3" x 2" x 1/8" x 0'-8"	ST 413
ANGLE ASSEMBLY (AA24 IS REPLACED BY AA24X ABOVE FLR. 74) ⚠	AA7	1	SEE REF. DRWG.	ST 404
	AA9	4	SEE REF. DRWG.	ST 404
	AA92	1	SEE REF. DRWG.	ST 404
	AA11	1	SEE REF. DRWG.	ST. 404
	AA16	1	SEE REF. DRWG.	ST 404
	AA17	3	SEE REF. DRWG.	ST 404
	AA18	1	SEE REF. DRWG.	ST 404
	AA19	1	SEE REF. DRWG.	ST 404
	AA24	1	SEE REF. DRWG.	ST 412
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 6'-8"	ST 402
	F2, F2A	7	1 1/2" x 5/8" x 6'-10 1/2"	ST 402
	F3	1	1 1/2" x 5/8" x 6'-11 1/4"	ST 402
	F4	1	1 1/2" x 5/8" x 7'-0	ST 402
	F5	1	1 1/2" x 5/8" x 4'-6"	ST 402
PATCH PLATES	PP1	8	2" x 1/4" x 0'-9"	ST 400
	PP2	6	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	1	9" x 0.135" x 13'-11 1/2"	ST 303
	B	2	8" x 0.135" x 15'-2"	ST 303
	E	1	8" x 0.135" x 14'-4 1/2"	ST 303
	A8	1	3 1/8" x 0.135" x 13'-11 1/2"	ST 303
	B8	2	3 1/2" x 0.135" x 15'-2	ST 303
	E8	1	3 1/2" x 0.135" x 14'-4 1/2"	ST 303
ANGLE CLIPS ⚠	C2	6	2 1/2" x 1 1/2" x 1/4" x 0'-6"	ST 400
	C1	12	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
DAMPING SADDLE	DUS-3	1	3 1/2" x 3 1/8" x 3/8" x 3'-6 7/8"	ST 298
	DUS-5	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST 299
	DUS-6	3	3 1/2" x 3 1/2" x 3/8" x 4'-4 7/8"	ST 299
	DUS-7	1	3 1/2" x 3 1/2" x 3/8" x 4'-4 7/8"	ST 299
MISC. PLATES	PF-4	2	1 1/2" x 1/2" x 0'-4"	ST 400
	PF-3	5	3'-2" x 3/8" x 0'-3"	ST 400
CONN ANGLE	C5	1	3 x 2 x 37 x 0.3"	ST 413
CORNER ANGLE ASSEMBLY	AA20	1	SEE REF DRWG	ST 405
"B SHEAR ANCHOR	SA2	2	"B REBAR x 0'-9"	ST 400

NO	DATE	REVISION	BY
1	4-8-69	AS NOTED	G.D.C.

REF. DRWG. #

7-A61-30	1-6-69	SA-124	1-6-69
7-A61-31	1-6-69	7-A84-14,16,1	10-15-68
7-A61-32	1-6-69	7-A84-15,18	7-22-68
7-A92-8	1-6-69	7-A84-21	7-22-68
7-A82-16	1-6-69	7-A84-23,25	7-22-68
7-A83-41	1-6-69	7-A84-29	1-3-69
7-A83-51	1-6-69	7-A84 39-41, 43	7-22-68
7-A84-3	10-15-68	7-A84-42	10-15-68
		7-A83-45	12-20-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

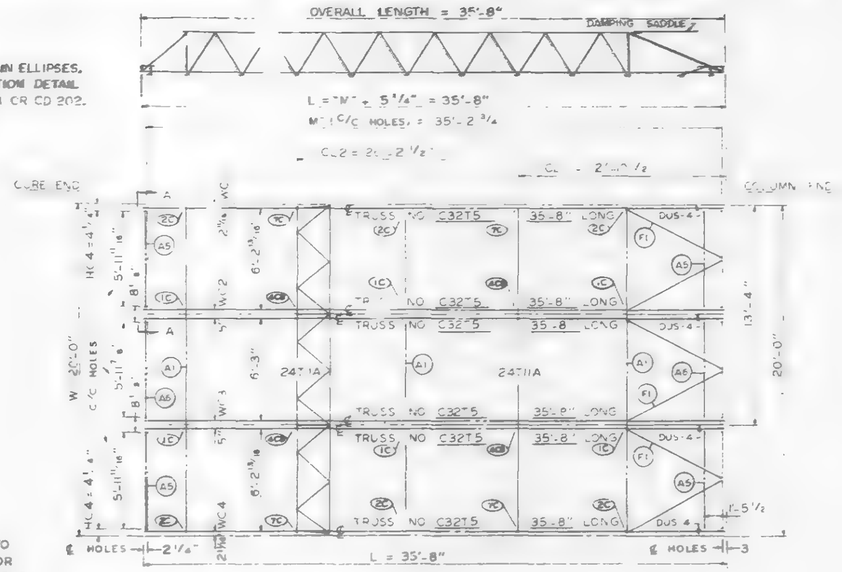
BLDG. A FLOORS 78 (NORTH & SOUTH) 44 (NORTH)
PANEL F3 19'-5" x 59'-0 3/4"
BLDG. B FLOORS 44 & 78 (EAST & WEST)

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION FOR P.A.N.Y.A. DATE 4/25/69
APPROVED FOR FABRICATION BY DATE
FOR FABRICATOR
DETAILED BY CARL BEHR

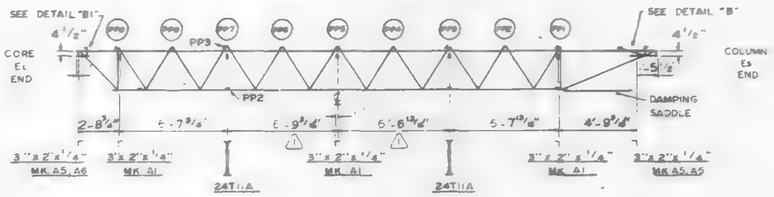
DESIGN DRAWING NO. 7-A83-51
DRAWN BY: [illegible] DATE JAN. 17, 1969
CHECKED BY: T.M. CHURA DATE JAN. 17, 1969
FABRICATION CONT. NO. W.T.C. 221
PLATE
IN CHARGE OF PROD. DEV.
SHEET NO. FP-F3

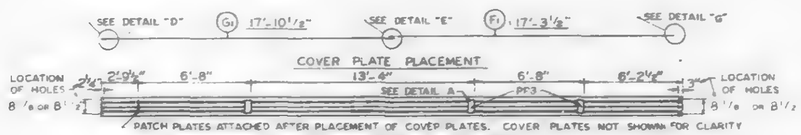
LETTERS AND NUMBERS IN ELLIPSES, ie (AC), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.

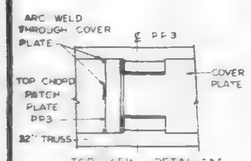


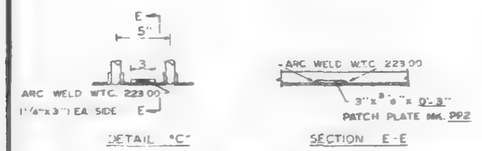
PANEL NO. J1 SIZE 20'-0" x 35'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.





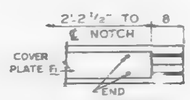


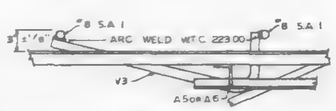


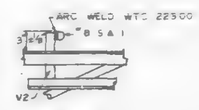
NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4 x FULL THROAT FILLET. A = 1/4" B = 1/4"

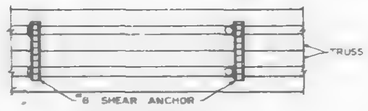
COVER PLATES 20 GA THICK

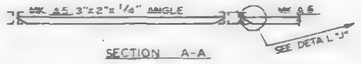
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00

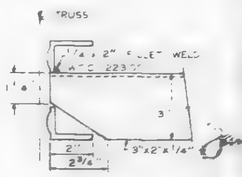


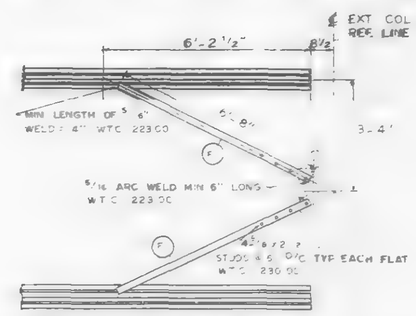




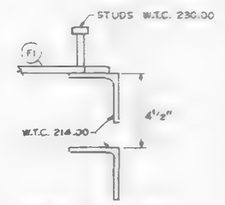








TYPICAL PLAN OF TOP CHORD HORIZONTAL END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	6	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T1A	2	2T11A - 11"	BT211A
3" x 2" x 1/4" ANGLE	A	3	3" x 2" x 4" x 15"	ST403
	A5	4	3" x 2" x 1'-4" x 6'-13 3/16"	ST403
	A6	2	3" x 2" x 1'-4" x 0'-6"	ST403
DIAGONAL FLATS	F	6	4 1/2" x 3/8" x 2'-5"	ST402
PATCH PLATES	PP3	16	2" x 1/4" x 0'-7"	ST400
	PP2	16	5" x 3/8" x 0'-3"	ST400
COVER PLATES	G1	4	7'-10" x 0'-0.135" x 17'-10 1/2"	ST303
	F1	4	7'-10" x 0'-0.135" x 17'-3 1/2"	ST303
ANGLE CLIPS	C2	2	6" x 3 1/2" x 5 1/16" x 8"	ST400
3/4" ℄ SHEAR ANCHOR	SA1	12	3/4" ℄ REBAR x 0'-7"	ST400
DAMPING SADDLE	DUS4	4	3 1/2" x 3 1/2" x 3/16" x 3 6"	ST298
CONNECTION BAR	CB1	4	1" ℄ x 1'-3"	ST400
CONNECTION PLATES	P1	6	3 1/2" x 3/8" x 0'-6 1/2"	ST400
	P2	4	4 1/2" x .39" x 0'-9"	ST400
	P3	4	4 1/2" x .39" x 1'-0"	ST400

NO	DATE	REVISION	BY
1	2-21-68	AS NOTED	G.D.C.

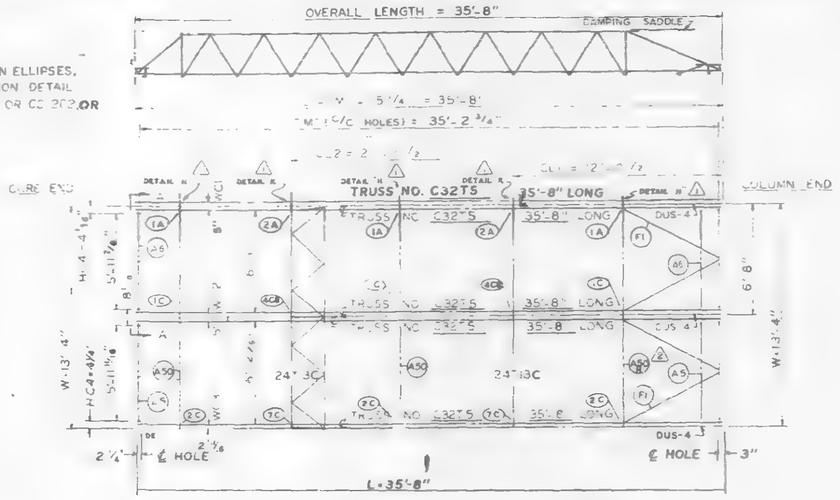
REF DWG
- ABA 3 & 3 — 1-3-68
- ABA 5 & 16 — 5-8-68
- ABA 39-42 — 1-3-68
- SA 24 — 10-20-67
- ABB3 2 — 1-3-68
- A6 1 & 2 — 5-10-68
- ABC 6 — 2-15-68
- ABA 42 — 4-1-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24, 26-40, 50-58, 60-66, 68 74, 84-91 & 93-106 (EAST & WEST) PANEL J1 - 20'-0" x 35'-8"

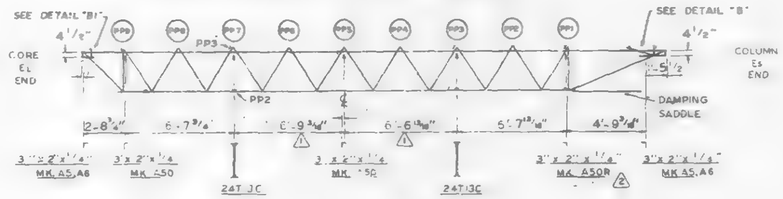
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB3 & 5-10-68 PLATE
APPROVED FOR FABRICATION FOR PONYA. DATE 4/26/68
DRAWN BY B.B. DATE APRIL 10, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M CHURA DATE APRIL 10, 1968
DETAILED BY A.C. WEBER
LACLEDE STEEL CO.
FABRICATION CONT NO WTC 221
SHEET NO FP-J1

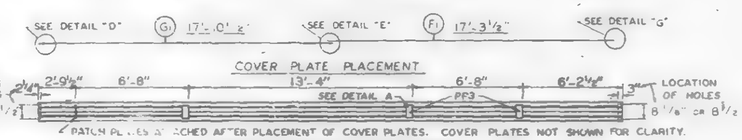
LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202, OR CD229

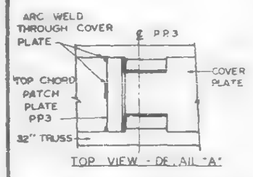


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. M1 SIZE 13'-4" x 35'-8"

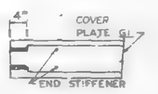




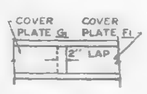


TOP VIEW - DETAIL "A"

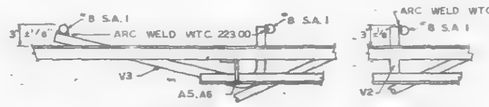
DETAIL "A" SECTION D-D



DETAIL "D"

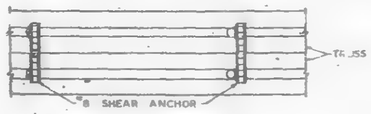


DETAIL "E"

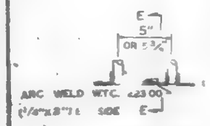


DETAIL "B" DETAIL "B1"

COVER PLATES 29 GA. THICK



TOP VIEW - DETAIL "B"

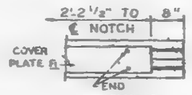


DETAIL "C"

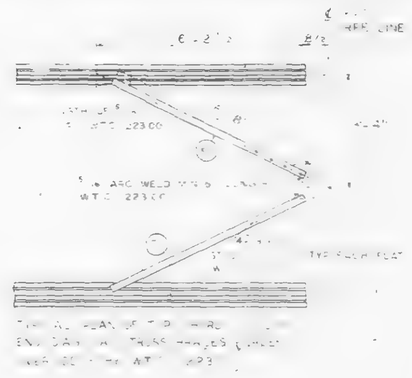
SECTION E-E

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIE OR EQUA
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE
A = 1/4" FULL THROAT
B = 1/4"

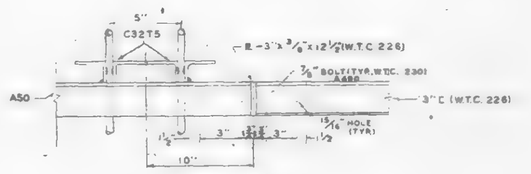
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00



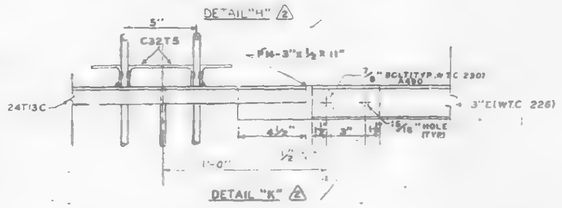
DETAIL "G"



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

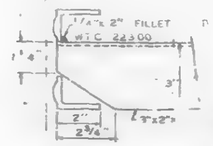


DETAIL "H"



DETAIL "K"

SECTION A-
END SUPPORT ANGLE - ASHMENT



DETAIL "J"
END SUPPORT ANGLE - ASHMENT

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T5	5	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T13C	2	2T13C - 14'-1 1/2	ST213C
3"x2"x1/4 ANGLE	A50	2		ST413
	A50R	1	3"x2"x1/4"x6'-1 13/16"	ST413
	A5	2	3"x2"x1/4"x6'-1 13/16"	ST403
	A6	2	3"x2"x1/4"x6'-2"	ST403
ANGLE FLATS	F	4	2"x5 3/8"x6 3/8"	ST402
PATCH PLATES	PP3	12	2"x 4"x 0'-7"	ST400
	PP2	12	3"x 3 1/8"x 0'-3"	ST400
COVER PLATES	G	3	7"x 0'-3 5/8"x 7'-0 1/2"	ST303
	F	3	7"x 0'-3 5/8"x 7'-3 1/2"	ST303
ANGLE CLIPS	C2	8	2 1/2"x 3 1/2"x 3/4"x 6"	ST400
3/4" ℄ SHEAR ANCHOR	SA1	8	3/4" ℄ REBAR x 0'-7"	ST400
DAMPING SADDLE	DUS-4	1	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST298
CONNECTION BAR	CB11	2	1" ℄ x 1'-3"	ST400
CONNECTION PLATES	P1	3	3'-8"x 3'-8"x 0'-6 1/2"	ST400
	P2	2	4 1/2"x .39"x 0'-9"	ST400
	P3	2	4 1/2"x .30"x 1'-0"	ST400
	P14	2	3"x 1/2"x 0'-11"	ST409

NO.	DATE	REVISION	BY
2	4-18-69	AS NOTED	BDC
1	3-11-69	AS NOTED	BDC

REF. DRWG	
7-A83-22	7-22-68
7-A84-3 & 31	1-3-69
7-A84-5 & 16	7-22-68
7-A84-39-41	7-22-68
SA-124	1-6-69
7-A83-2	1-3-68
7-A81-11 & 12	7-22-68
7-A82	7-22-68
7-A84-42	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N. Y. C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45-49 (WEST), 80-83 (EAST)

PANEL M1 - 13'-4" x 35'-8"

BLDG. B FLOORS 45-49 (SOUTH) 80-83 (NORTH) (2)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

APPROVED FOR FABRICATION FOR P.O.N.Y.A. BY [signature] DATE 4-17-69

APPROVED FOR FABRICATION BY [signature] DATE

DETAILED BY [signature]

DESIGN DRAWING NO. 7 A83-22 PLATE

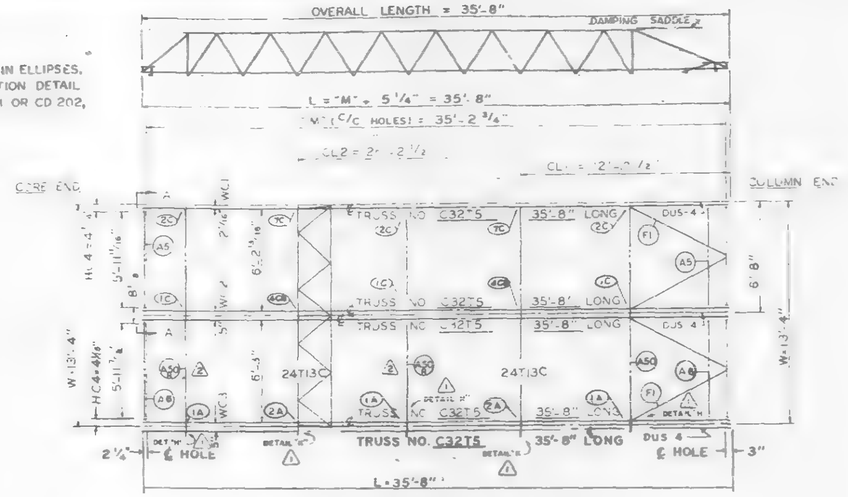
DRAWN BY B.B. DATE 1-29-69

CHECKED BY T.M.CHUBA DATE 1-29-69

FABRICATION CONT NO W.T.C 221

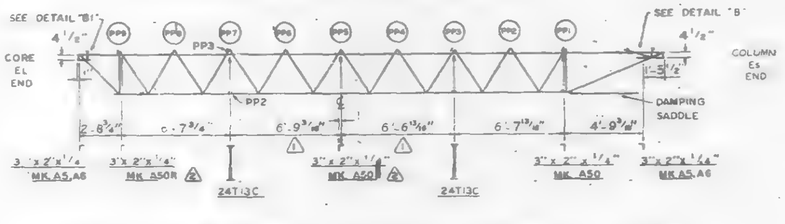
SHEET NO. FP-M1

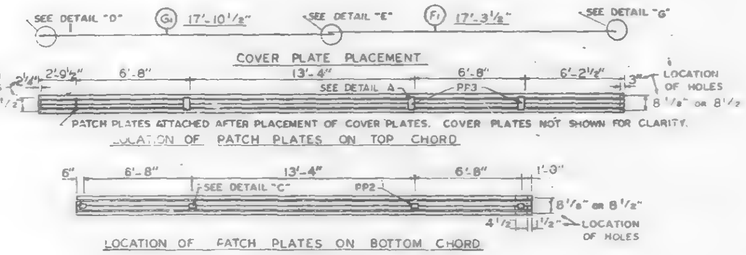
LETTERS AND NUMBERS IN ELLIPSES, ie (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202, OR CD 229

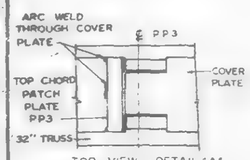


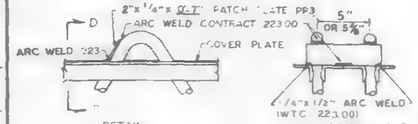
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. MR1 SIZE 13'-4" x 35'-8"

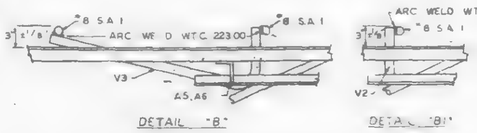


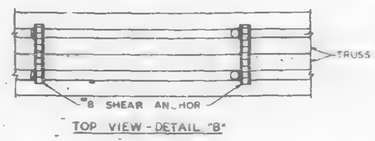


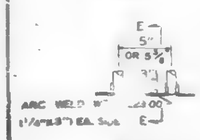




COVER PLATES 29 GA THICK

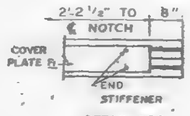


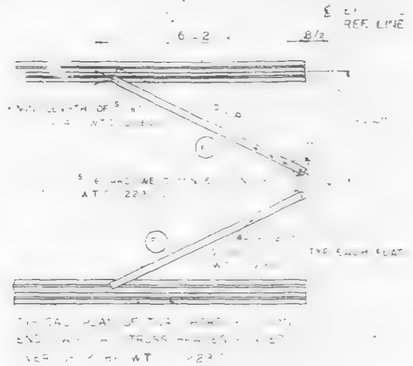


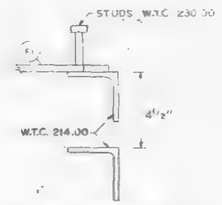


NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET

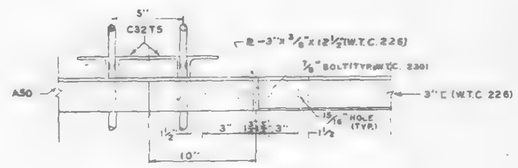
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00

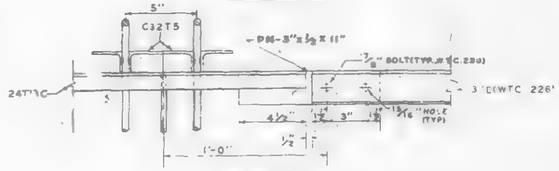


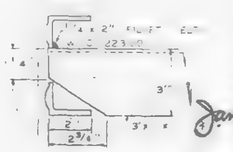


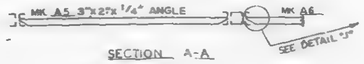


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.









REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	5	C32T5 - 35'-8"	ST 205
BRIDGING TRUSSES	T13C	2	2T13C @ 4'-11 1/2"	ST 213C
3 x x 1/4 ANGLE	A5O (2)		3"x2"x 4"x 14'-11 1/4"	ST 413
	A5OR	2	3"x2"x 4"x 6'-1 7/8"	ST 403
	A5	2	3"x2"x 4"x 6'-1 7/8"	ST 403
	A6	2	3"x2"x 1/4 x 8'-2"	ST 403
DIAGONAL FLATS	F	4	1'-2" x 5/8 x 6'-8	ST 402
PATCH PLATES	PP3	12	2"x 1/4 x 0'-7"	ST 400
	PP2	12	3 x 3/8 x 0'-3"	ST 400
COVER PLATES	G	3	7" x 0.135 x 7'-10 2"	ST 303
	F1	3	7" x 0.135 x 7'-3" 2	ST 303
ANGLE CLIPS	C2	8	2 1/2 x 1 1/2 x 1/4 x 6"	ST 400
3/4" ℄ SHEAR ANCHOR	SA1	8	3/4" ℄ REBAR x 0'-7"	ST 400
DAMPING SADDLE	DUS4	3	3'-2" x 3'-2" x 4 3/8 x 3 6 7/8	ST 298
CONNECTION BAR	CB1	2	1'-0" x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	2	4 1/2" x .38" x 0'-9"	ST 400
	P3	2	4 1/2" x .38" x 1'-0"	ST 400
	P4	2	3" x 1 1/2" x 0'-11"	ST 409

NO	DATE	REVISION	
2	4-10-69	AS NOTED	G.D.C.
1	3-11-69	AS NOTED	G.D.C.

REF. DRWG

7-AB3-23	7-22-68
7-AB4-3 & 31	1-3-68
7-AB4-15 & 16	7-22-68
7-AB4-39-41	7-22-68
SA-124	1-6-69
7-AB3-2	1-3-68
7-AB1-11 & 12	7-22-68
7-AB2	7-22-68
7-AB4-42	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 46-49(EAST), 79-83(WEST)

PANEL MR1 - 13'-4" X 35'-8"

BLDG. B FLOORS 46-49 (NORTH) 79-83 (SOUTH) (2)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-AB3-23 PLATE

APPROVED FOR FABRICATION BY [illegible] FOR PONYA — DATE 4/25/69

DRAWN BY [illegible] DATE 1-20-69

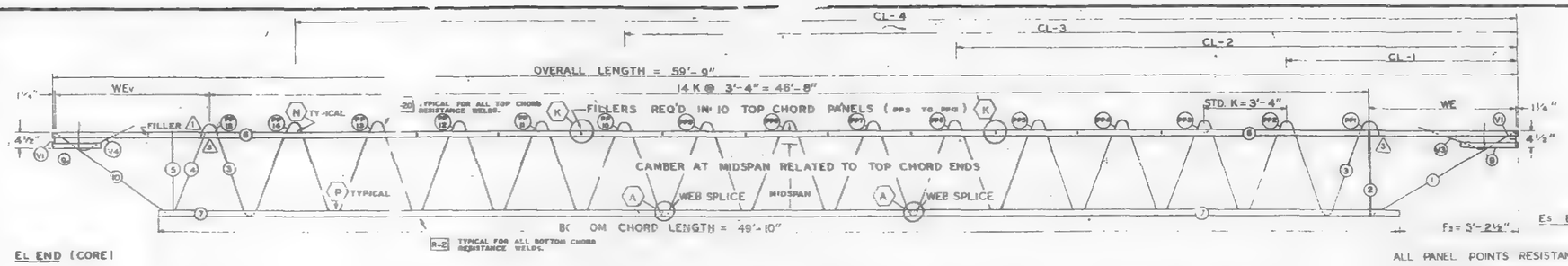
APPROVED FOR FABRICATION BY [illegible] — DATE

CHECKED BY T.M.CHURA DATE 1-20-69

DETAILED BY A.C. WEBER

FABRICATION CONT NO W.T.C. 221

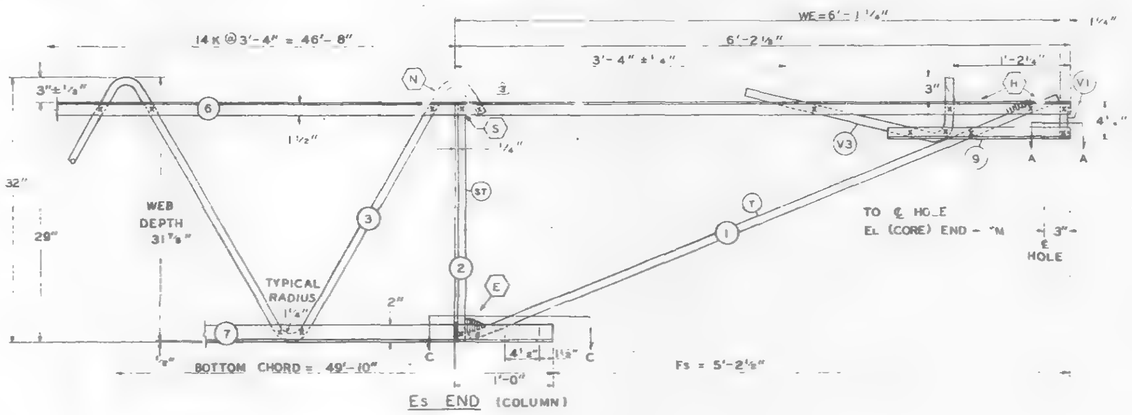
SHEET NO. FP-MR1



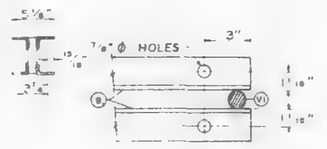
FABRICATION REQUIRMENTS		
	DESIGN	TOLERANCE
CAMBER AT MIDSPAN (2)	2"	± 3/8"
DESIGN DEPTH	29"	± 1/4"
PANEL "K"	3'-4"	± 1/4"
OVERALL LENGTH	59'-9"	± 3/8"
WEB DEPTH	31 7/8"	± 1/4"

ALL PANEL POINTS RESISTANCE WELDED (x).
ARC WELDS INDICATED AT SHADED AREAS AND AT BOTTOM CHORD WEB SPLICES (mmm).
ALL WELD DETAILS SHOWN ON SHEETS ST290 AND ST291.

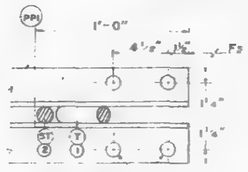
SEE SHEET ST295 FOR V1, V3, & V4 DETAILS.
LETTERS IN HEXAGON INDICATE WELD DETAIL, ie., (A).
(1) LETTERS AND NUMBERS IN SQUARES INDICATE RESISTANCE WELD STRENGTH IDENTIFIED IN THE QUALITY CONTROL PROGRAM, ie., R-2.



TRUSS ELEVATION

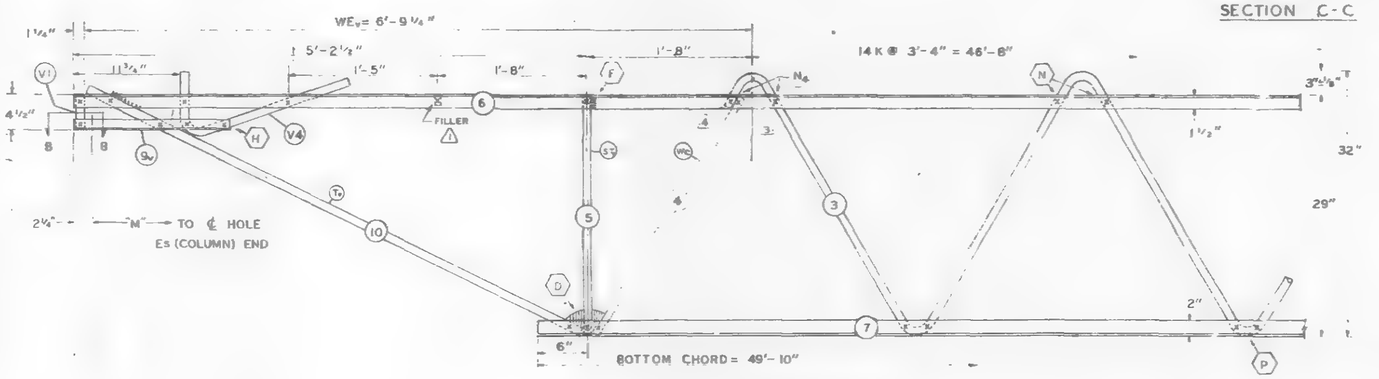


SECTION A-A

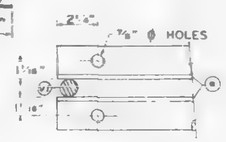


SECTION C-C

DAMPING UNIT CONNECTION PLATE ATTACHED TO BOTTOM CHORD (COL. END) IN FIELD. ASSEMBLY BY CONTRACT WTC 223.00.



El END (CORE)



SECTION B-B

NO.	DATE	REVISION	BY
4	12-6-68	AS NOTED	G.D.C
3	10-7-68	AS NOTED	G.D.C
2	6-22-68	CAMBER, REF DRWG. DATE	T.M.C
1	3-13-68	FILLER AND WELD DETAIL	J.R.P

(3) REF. DRWGS.

7-AB1-2	7-22-68
7-AB1-52	2-15-68
7-AB4-50	8-1-68
7-AB3-2	1-3-68
7-AB4-50.5	10-20-67
7-AB1-53 (2)	7-22-68

PAINT
LACLEDE ELECTROCOAT
RED NO. 10001

TRUSS DESIGNATION	TOP CHORD TWO ANGLES				BOTTOM CHORD TWO ANGLES				MAIN WEB "W"					FILLER		"M" ℄ HOLES	TRUSS DATA	
	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	DIA	LENGTH	NO OF K	NO	DIA			
C32TIA-599	6	A242	2"x1½"x.25"	59'-9"	7	A36	3"x2"x.37"	49'-10"	3	A36	1.09	88'-1½"	14 @ 3'-4" = 46'-8"	11	1.09	59'-3¾"		

COLUMN END

Es END	TRUSS DESIGNATION	BEARING ANGLES				WE	DIAGONAL "T" STRUT				VERTICAL "ST" STRUT				END STIFFENER					
		MK.	TYPE STEEL	CHORD SIZE	LENGTH		MK.	TYPE STEEL	DIA	LENGTH	MK.	TYPE STEEL	DIA	LENGTH	MK V1 TYPE STEEL	MK V1 DIA	MK V1 LENGTH	MK V3 TYPE STEEL	MK V3 DIA	MK V3 LENGTH
	C32TIA-599	9	A242	2"x1½"x.25"	1'-10"	6'-1½"	1	A242	1.14	6'-5"	2	A36	1.09	2'-4⅞"	A242	1.14	4⅜"	A242	1.14	2'-9½"

CORE END

El END	TRUSS DESIGNATION	BEARING ANGLES				WEv	DIAGONAL "Tv" STRUT				VERTICAL "STv" STRUT				END STIFFENER MK. V1			WEB "WC" MK.					WEB "WT" MK.				
		MK.	TYPE STEEL	CHORD SIZE	LENGTH		MK.	TYPE STEEL	DIA	LENGTH	MK.	TYPE STEEL	DIA	LENGTH	TYPE STEEL	DIA	LENGTH	MK.	TYPE STEEL	PCS	DIA	LENGTH	MK.	TYPE STEEL	PCS	DIA	LENGTH
	C32TIA-599	9v	A242	2"x1½"x.25"	1'-7"	6'-9¼"	10	A242	1.14	5'-6½"	5	A242	1.14	2'-4⅞"	A242	1.14	4⅜"	4	A242	1	1.14	2'-1C"					

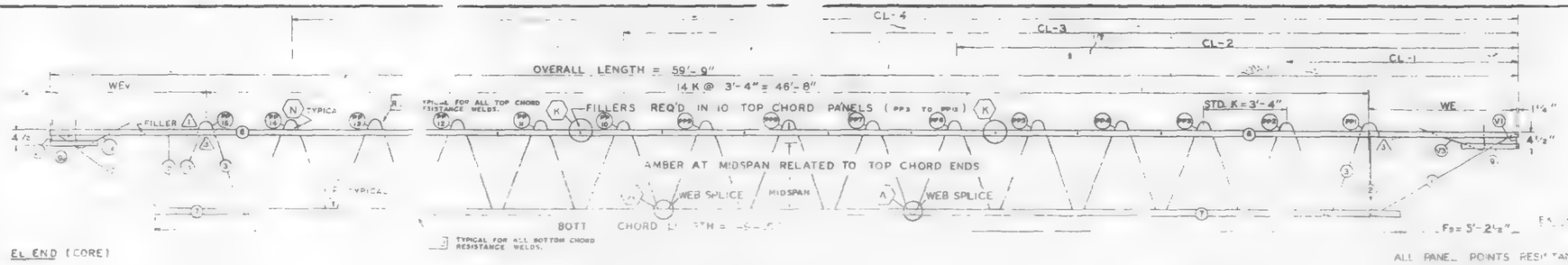
CHECK DIMENSION FOR TRUSS FAB

LOCATION OF TRANS. TRUSS				
CL-1	CL-2	CL-3	CL-4	Fs
9'-6 /2",	22'-10 1/2"	36'-2 1/2"	49'-6 1/2"	5'-2 1/4"

STEEL TRUSS DETAILS
FOR
WORLD TRADE CENTER - N.Y.C
FOR
THE PORT OF NEW YORK AUTHORITY
FLOOR TRUSS C32TIA 59'-9" OVERALL
WORLD TRADE CENTER TOWERS A-8

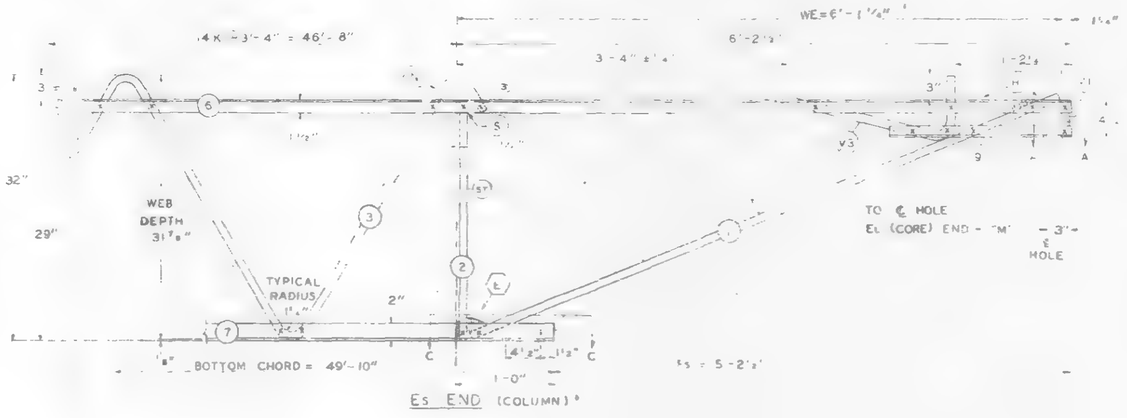
FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT: MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB1-2 7-AB3-2 PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A.	DATE 12/11/68	DRAWN BY: L.W.B. DATE: FEB. 24, 1968
APPROVED FOR FABRICATION BY A.C. WEBER FOR FABRICATOR	DATE	CHECKED BY J.R. PAUL DATE FEB. 24, 1968
DETAILED BY A.C. WEBER		FABRICATION CONT NO W.T.C. 221
		IN CHARGE OF PROD. DEV.
		SHEET NO. ST201A



TRUSS ELEVATION

FABRICATION REQUIRMENTS		
	DESIGN	TOLERANCE
CAMBER AT MIDSPAN (2)	2"	± 3/8"
DESIGN DEPTH	29"	± 1/8"
PANEL "K"	3'-4"	± 1/4"
OVERALL LENGTH	59'	± 3/8"
WEB DEPTH	3...	± 1/4"



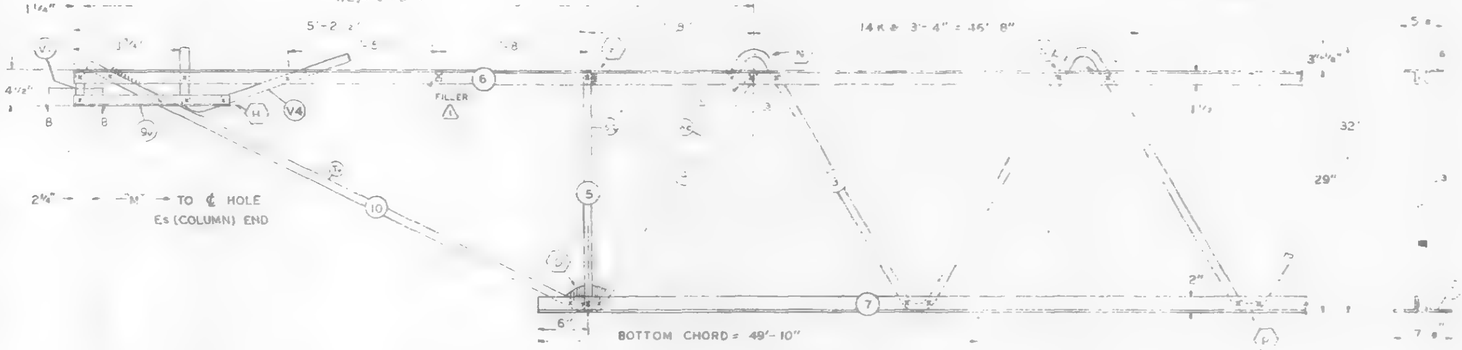
SECTION A-A

SECTION C-C

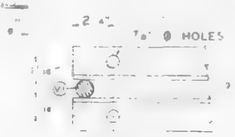
ALL PANEL POINTS RESISTANCE WELDED (exc. ARC WELDS INDICATED AT SHADED AREAS AND AT BOTTOM CHORD WEB SPLICES (omitt). ALL WELD DETAILS SHOWN ON SHEET ST290 AND ST291.

SEE SHEET ST295 FOR V1, V3, & V4 DETAIL. LETTERS IN HEXAGON INDICATE WELD DETAIL, ie., (A). LETTERS AND NUMBERS IN SQUARES INDICATE RESISTANCE WELD STRENGTH IDENTIFIED IN THE QUALITY CONTROL PROGRAM, [illegible]

DAMPING UNIT CONNECTION PLATE ATTACHED TO BOTTOM CHORD COL END) IN FIELD ASSEMBLY CONTRACT NO. [illegible]



EL END (CORE)



SECTION B-B

NO.	DATE	REVISION	BY
3	10-7-68	AS NOTED	J.D.C.
2	10-22-68	CAMBER, REF. DRWG. DATE	T.M.C.
1	3-19-68	FILLER AND WELD DETAIL	J.R.P.

REF. DRWGS.

7-AB1-2	7-22-68
7-AB1-52	2-15-68
7-AB4-50	8-1-68
7-AB3-2	1-3-68
7-AB4-50.5	10-20-67
7-AB1-53 (2)	7-22-68

PAINT
LACLEDE ELECTROCOAT
RED NO. 10001

TRUSS DESIGNATION	TOP CHORD TWO ANGLES MK	TYPE STEEL	CHORD SIZE	LENGTH	BOTTOM CHORD TWO ANGLES MK	TYPE STEEL	CHORD SIZE	LENGTH	MAIN WEB "W" MK	TYPE STEEL	DIA	LENGTH	NO OF K	FILLER NO	FILLER DIA	"M" ℄ HOLES	TRUSS DATA
C32TIA-599	6	A242	2"x1 1/2"x.25"	59'-9"	7	A36	3"x2"x.37"	49'-10"	3	A36	1.09	AB'-1"	14 @ 3'-4" = 46'-8"	11	1.09	59'-3 3/4"	

EL IMN END	TRUSS DESIGNATION	BEARING ANGLES MK	TYPE STEEL	CHORD SIZE	LENGTH	WE MK	DIAGONAL "T" STRUT TYPE STEEL	DIA	LENGTH	VERTICAL "ST" STRUT MK	TYPE STEEL	DIA	LENGTH	END STIFFENER MK V2 TYPE STEEL	D	A	LENGTH	MK V3 TYPE STEEL	D	A	LENGTH
	C32TIA-599	9	A242	2"x1 1/2"x.25"	1'-0"	6'-1"	A242	1.14	6'-5"	2	A36	.09	2 4"	A242	1.14	4"		A242	1.14	2'-9 1/2"	

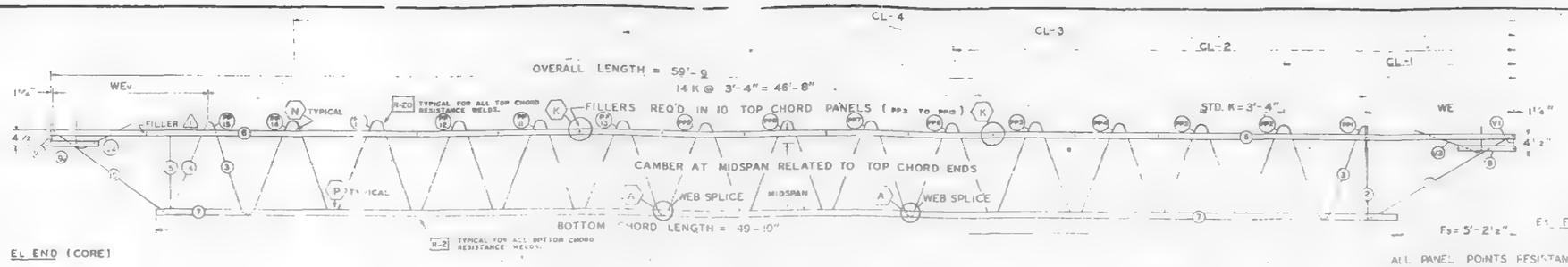
CORE END	TRUSS DESIGNATION	BEARING ANGLES MK	TYPE STEEL	CHORD SIZE	LENGTH	WE MK	DIAGONAL "T" STRUT TYPE STEEL	DIA	LENGTH	VERTICAL "ST" STRUT MK	TYPE STEEL	DIA	LENGTH	STIFFE MK V1 TYPE STEEL	DIA	LENGTH	MK V2 TYPE	L	LENGTH	MK V4 S. EL	DIA	LENGTH	WEB "WC" MK	TYPE STEEL	PCS	DIA	LENGTH	WEB "WT" MK	TYPE STEEL	PCS	DIA	LENGTH
	C32TIA-599	9	A242	2"x1 1/2"x.25"	1'-7"	5'-9 1/2"	10 A242	1.14	5'-6 1/2"	5	A242	1.14	2'-4 7/8"	A242	1.14	4 3/4"	—	—	—	A242	1.14	2'-2 1/2"	4	A242	1	1.14	2'-10"	—	—	—	—	—

CHECK DIMENSION FOR TRUSS FAB LOCATION OF TRANS TRUSS

CL-1	CL-2	CL-3	CL-4	Fs
9'-6 1/2"	22'-10 1/2"	36'-2 1/2"	49'-6 1/2"	5'-2 1/2"

STEEL TRUSS DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
FLOOR TRUSS C32TIA 59'-9" OVERALL
WORLD TRADE CENTER TOWERS A-B

FABRICATION BY: LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB1-2 7-AB3-2 PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A. DATE 10/19/68
APPROVED FOR FABRICATION BY A.C. WEBER FOR FABRICATOR DATE
DETAILED BY A.C. WEBER
DRAWN BY: [illegible] DATE: FEB. 24, 1988
CHECKED BY J.B. PAUL DATE FEB. 24, 1988
IN CHARGE OF PROD. DEPT.
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. ST201A

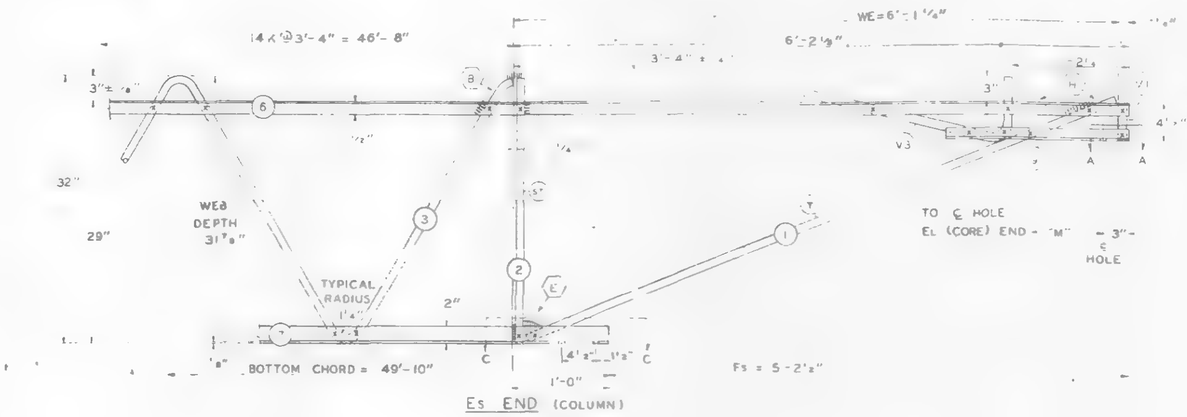


EL END (CORE)

FABRICATION REQUIRMENTS		
	DESIGN	TOLERANCE
CAMBER AT MIDSPAN (2)	2"	± 3/8"
DESIGN DEPTH	— "	± 1/4"
PANEL "K"	3'-4"	± 1/4"
OVERALL LENGTH	59'-9"	± 3 8"
WEB DEPTH	31 7/8"	± 1/16"

ALL PANEL POINTS RESISTANCE WELDED (R-2). ARC WELDS INDICATED AT SHADED AREAS AND AT BOTTOM CHORD WEB SPLICES (R-2). ALL WELD DETAILS SHOWN ON SHEETS ST290 AND ST291.

SEE SHEET ST295 FOR V1, V3, & 4 DETAILS. LETTERS IN HEXAGON INDICATE WELD DETAIL, ie., (A). LETTERS AND NUMBERS IN SQUARES INDICATE RESISTANCE WELD STRENGTH IDENTIFIED IN THE QUALITY CONTROL PROGRAM, ie., R-2.



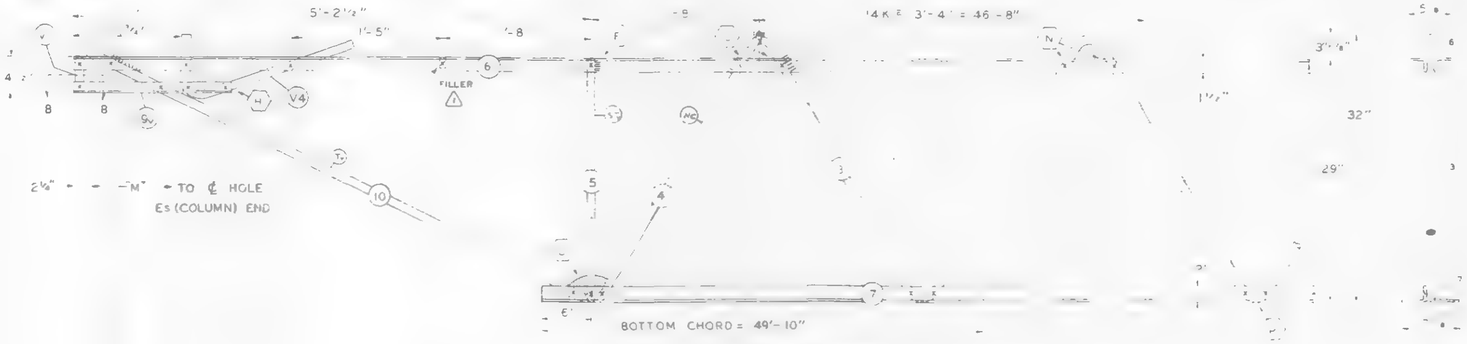
Es END (COLUMN)

TRUSS ELEVATION

SECTION A-A

SECTION C-C

DAMPING UNIT CONNECTION PLATE ATTACHED TO BOTTOM CHORD (COL END) IN FIELD ASSEMBLY BY CONTRACT WTC 223.00.



EL END (CORE)

SECTION B-B

NO	DATE	REVISION	BY
2	6-22-68	CAMBER, REF DRWG DATE	TMC
1	3-19-68	FILLER AND WELD DETAIL	JRP

REF. DRWGS.

7-AB1-2	2-15-68
7-AB1-52	2-15-68
7-AB4-50 & 50.2	10-20-67
7-AB3-2	1-3-68
7-AB4-50.5	10-20-67
7-AB1-53 (2)	4-1-68

PAINT
LACLEDE ELECTROCOAT
REQ NO 10001

TRUSS DESIGNATION	TOP CHORD TWO ANGLES				BOTTOM CHORD TWO ANGLES				MAIN WEB "W"				FILLER	"M" ℄ HOLES	TRUSS DATA	
	MK	TYPE STEEL	CHORD SIZE	LENGTH	MK	TYPE STEEL	CHORD SIZE	LENGTH	MK	TYPE STEEL	DIA	LENGTH	NO OF K	NO	DIA		
C32TIA-599	6	A242	2"x1 1/2"x.25"	59'-9"	7	A36	3"x2"x.37"	49'-10"	3	A36	1.09	87'-2 1/2"	14 @ 3'-4" = 46'-8"	11	1.09	59'-3 3/4"	

COLUMN END

ES END	TRUSS DESIGNATION	BEARING ANGLES				WE	DIAGONAL "T" STRUT				VERTICAL "ST" STRUT				END STIFFENER					
		MK	TYPE STEEL	CHORD SIZE	LENGTH		MK	TYPE STEEL	DIA	LENGTH	MK	TYPE STEEL	DIA	LENGTH	MK V1 TYPE STEEL	MK V1 DIA	MK V1 LENGTH	MK V3 TYPE STEEL	MK V3 DIA	MK V3 LENGTH
	C32TIA-599	9	A242	2"x1 1/2"x.25"	1'-10"	6'-1 1/4"	1	A242	14	6'-5"	2	A36	1.09	2'-7 7/8"	A242	1.14	4 3/8"	A242	1.14	2'-9 1/2"

CORE END

EL END	TRUSS DESIGNATION	BEARING ANGLES				WE	DIAGONAL "T" STRUT				VERTICAL "ST" STRUT				END STIFFENER MK V1			WEB "WC" MK 2				WEB "WC" MK V4				WEB "WT"				
		MK	TYPE STEEL	CHORD SIZE	LENGTH		MK	TYPE STEEL	DIA	LENGTH	MK	TYPE STEEL	DIA	LENGTH	TYPE STEEL	DIA	LENGTH	TYPE STEEL	DIA	LENGTH	MK	TYPE STEEL	DIA	LENGTH	MK	TYPE STEEL	PCS	DIA	LENGTH
	C32TIA-599	9	A242	2"x1 1/2"x.25"	7'	6'-9 1/4"	10	A242	1.14	5'-6 1/2"	5	A242	1.14	2' 4 1/4"	A242	1.14	4 3/4"	—	—	—	4	A242	1.14	2'-2 1/2"	4	A242	1	1.14	3'-0 1/2"

CHECK DIMENSION FOR TRUSS FAB LOCATION OF TRANS TRUSS

CL-1	CL-2	CL-3	CL-4	Fs
9'-6 1/2"	22'-10 1/2"	36'-2 1/2"	49'-6 1/2"	5'-2 1/2"

STEEL TRUSS DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

FLOOR TRUSS C32TIA 59'-9" OVERALL

WORLD TRADE CENTER TOWERS A-B

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO 7-AB1-2 7-AB3-2 PLATE

APPROVED FOR FABRICATION BY JW FOR PONYA — DATE 6/25/68

DRAWN BY WR DATE FEB. 26, 1968

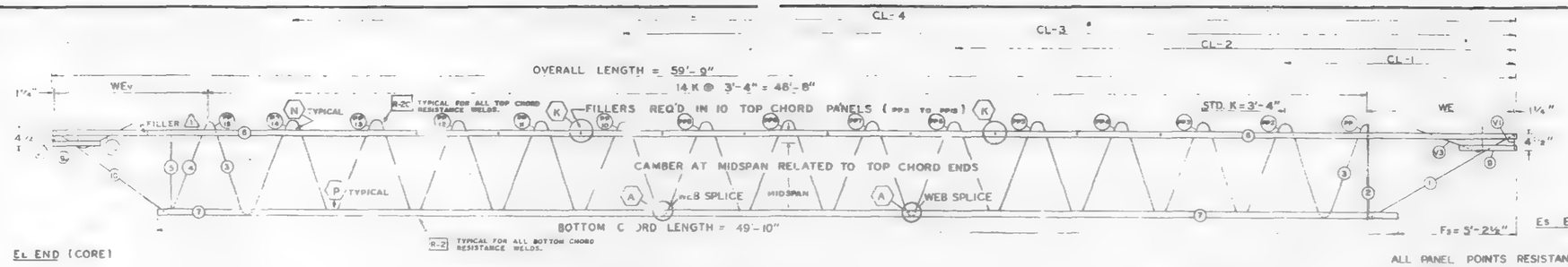
APPROVED FOR FABRICATION BY A.C WEBER FOR FABRICATOR — DATE

CHECKED BY J R PAUL DATE FEB. 26, 1968 — IN CHARGE OF PROD DEV

DETAILED BY A C WEBER

FABRICATION CONT NO WTC 221

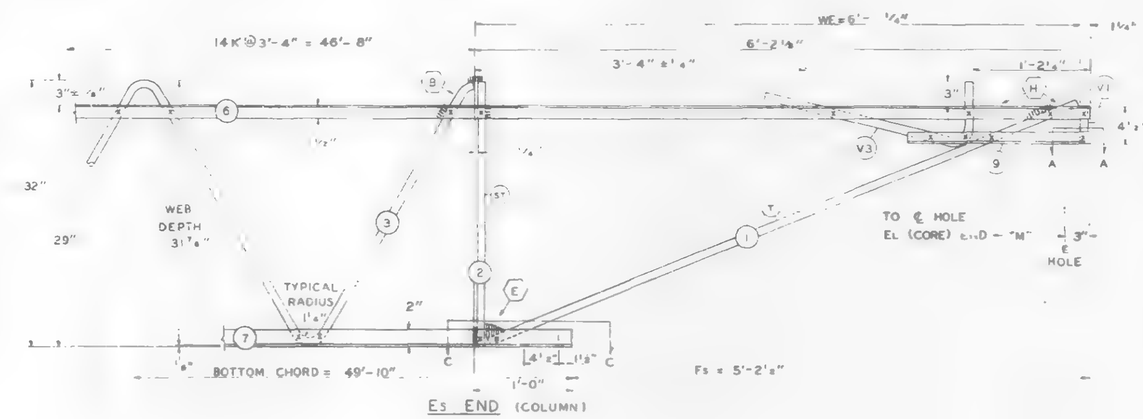
SHEET NO ST20A



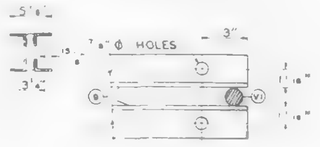
FABRICATION REQUIRMENTS.		
	DESIGN	TOLERANCE
CAMBER AT MIDSPAN	1"	± 3/4"
DESIGN DEPTH	2'	± 1/4"
PANEL "K"	3'-4"	± 1/4'
OVERALL LENGTH	59'-9"	± "
WEB DEPTH	31 7/8"	1/4"

ALL PANEL POINTS RESISTANCE WELDED (⌀).
ARC WELDS INDICATED AT SHADED AREAS AND AT BOTTOM CHORD WEB SPLICES (═══).
ALL WELD DETAILS SHOWN ON SHEETS ST290 AND ST291.

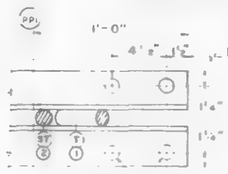
SEE SHEET ST295 FOR V1, V3, & V4 DETAILS.
LETTERS IN HEXAGON INDICATE WELD DETAIL, ie., (A).
⚠1 LETTERS AND NUMBERS IN SQUARES INDICATE RESISTANCE WELD STRENGTH IDENTIFIED IN THE QUALITY CONTROL PROGRAM, ie., R-2.



TRUSS ELEVATION

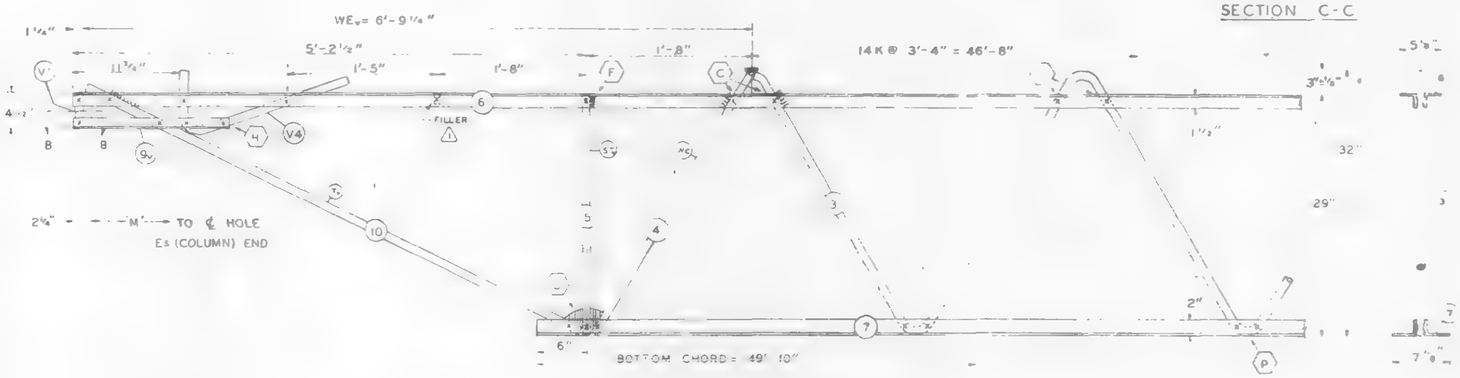


SECTION A-A



SECTION C-C

DAMPING UNIT CONNECTION PLATE ATTACHED TO BOTTOM CHORD (COL END) IN FIELD ASSEMBLY BY CONTRACT WTC 22300.



SECTION B-B

⚠	3-19-68	FILLER AND WELD DETAIL	J.R.P
NO	DATE	REVISION	BY

REF. DRWGS.

7-AB1-2	2-15-68
7-AB1-S2	2-15-68
7-AB4-S0 & S0.2	10-20-67
7-AB3-2	1-3-68
7-AB4-S0.5	10-20-67
7-AB1-S3	1-3-68

PAINT
LACLEDE ELECTROCOAT
RED NO. 10001

TRUSS DESIGNATION	TOP CHORD TWO ANGLES				BOTTOM CHORD TWO ANGLES				MAIN WEB "W"					FILLER		"M" ℄ HOLES	TRUSS DATA	
	MK	TYPE STEEL	CHORD SIZE	LENGTH	MK	TYPE STEEL	CHORD SIZE	LENGTH	MK	TYPE STEEL	DIA	LENGTH	NO OF K	NO	DIA			
C32T1A-S99	6	A242	2"x1½"x.25"	59'-9"	7	A36	3"x2"x.37"	49'-10"	3	A36	1.09	87'-2½"	14 @ 3'-4" = 46'-8"	11	1.09	59'-3¾"		

COLUMN END

Es END	TRUSS DESIGNATION	BEARING ANGLES				WE	DIAGONAL "T" STRUT				VERTICAL "ST" STRUT				END STIFFENER					
		MK	TYPE STEEL	CHORD SIZE	LENGTH		MK	TYPE STEEL	DIA	LENGTH	MK	TYPE STEEL	DIA	LENGTH	MK V1 TYPE STEEL	MK V1 DIA	MK V1 LENGTH	MK V3 TYPE STEEL	MK V3 LENGTH
	C32T1A-S99	9	A242	2"x1½"x.25"	1'-10"	6'-1¼"	1	A242	1.14	6'-5"	2	A36	1.09	2'-7⅞"	A242	1.14	4⅜"	A242	

CORE END

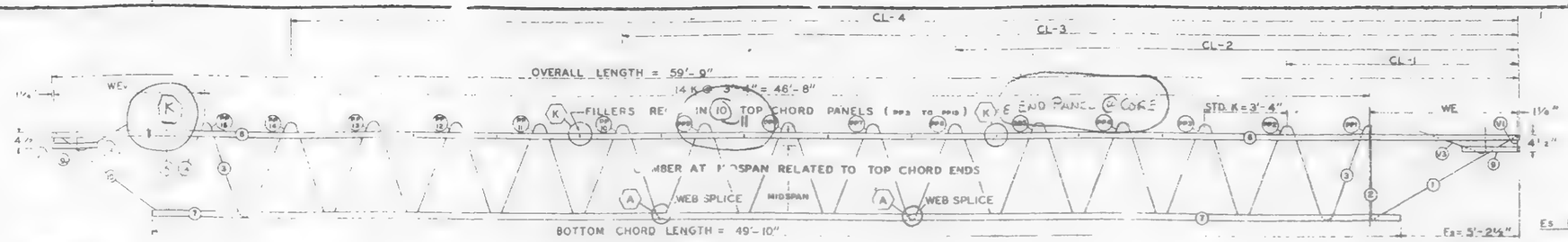
EL END	TRUSS DESIGNATION	BEARING ANGLES				WE	DIAGONAL "T" STRUT				VERTICAL "ST" STRUT				END STIFFENER								WEB "WC"					WEB "WT"				
		MK	TYPE STEEL	CHORD SIZE	LENGTH		MK	TYPE STEEL	DIA	LENGTH	MK	TYPE STEEL	DIA	LENGTH	MK V1 TYPE STEEL	MK V1 DIA	MK V1 LENGTH	MK V2 TYPE STEEL	MK V2 DIA	MK V2 LENGTH	MK V4 TYPE STEEL	MK V4 DIA	MK V4 LENGTH	MK	TYPE STEEL	PCS	DIA	LENGTH	MK	TYPE STEEL	PCS	DIA	LENGTH
	C32T1A-S99	9	A242	2"x1½"x.25"	1'-7"	6'-9¼"	10	A242	1.14	5'-6½"	5	A242	1.14	2'-4¾"	A242	1.14	4⅜"	—	—	—	A242	1.14	2'-2½"	4	A242	1	1.14	3'-0½"	—	—	—	—	—

CHECK DIMENSION FOR TRUSS FAB LOCATION OF TRANS TRUSS				
CL-1	CL-2	CL-3	CL-4	Fs
9'-6½"	22'-10½"	36'-2½"	49'-6½"	5'-2½"

STEEL TRUSS DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
FLOOR TRUSS C32T1A 59'-9" OVERALL
WORLD TRADE CENTER TOWERS A-B

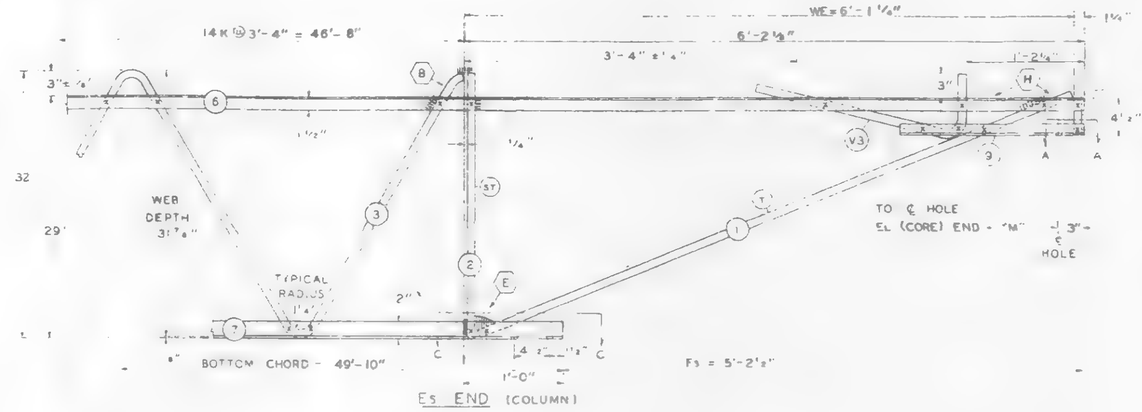
FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT: MADISON, ILLINOIS	DESIGN DRAWING NO. 7-AB1-2 7-AB3-2	PLATE — —
APPROVED FOR FABRICATION BY: — FOR P.O.N.Y.A. DATE 3/26/68	DRAWN BY: J.R. DATE: FEB. 24, 1968	
APPROVED FOR FABRICATION BY A.C. WEBER FOR FABRICATOR DATE —	CHECKED BY: J.R. PAUL DATE: FEB. 24, 1968	IN CHARGE OF PROD. E.E.V.
DETAILED BY: A.C. WEBER	FABRICATION CONT. NO. W.T.C. 221	SHEET NO. ST201A

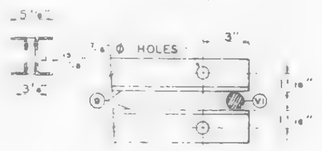


FABRICATION REQUIRMENTS		
	DESIGN	TOLERANCE
CAMBER AT MIDSPAN	1"	± 1/8"
DESIGN DEPTH	29"	" ± 1/8"
PANEL "K"	"	± 1/16"
OVERALL LENGTH	59'-0"	± 3/8
WEB DEPTH	31 7/8"	± 1/4

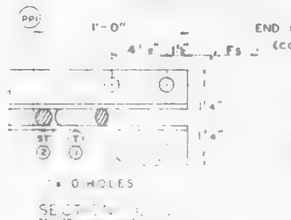
ALL PANEL POINTS RESISTANCE WELDED (≠).
ARC WELDS INDICATED AT SHADED AREAS AND AT BOTTOM CHORD WEB SPLICES (▬).
ALL WELD DETAILS SHOWN ON SHEETS ST290 AND ST291.
BOXED IN LETTERS INDICATE WELD DETAIL, i.e. (A).



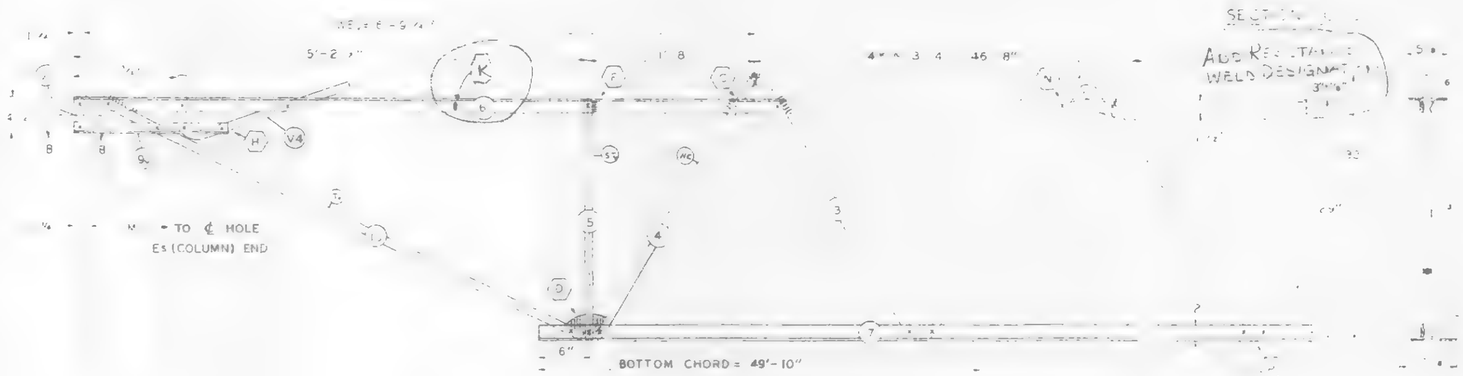
TRUSS ELEVATION



SECTION A-A



DAMPING CONNECTION PLATE ATTACHED TO BOTTOM CHORD (COL END) IN FIELD. ASSEMBLY BY CONTRACT WTC 223.00



El END (CORE)

SECTION B-B

TRUSS DESIGNATION	TOP CHORD TWO ANGLES				BOTTOM CHORD TWO ANGLES				MAIN WEB "W"					FILLER		"M" ℄ HOLES	TRUSS DATA	
	MK	TYPE STEEL	CHORD SIZE	LENGTH	MK	TYPE STEEL	CHORD SIZE	LENGTH	MK	TYPE STEEL	DIA	LENGTH	NO. OF K	NO	DIA			
C32TIA-599	6	A242	2"x1½"x.25"	59'-9"	7	A36	3"x2"x.37"	49'-10"	3	A36	1.09	87'-2⅛"	14 @ 3'-4" = 46'-8"	12	.09	59'-3¾"		

COLUMN END

Es END	TRUSS DESIGNATION	BEARING ANGLES				WE	DIAGONAL "T" STRUT				VERTICAL "ST" STRUT			END STIFFENER					
		MK	TYPE STEEL	CHORD SIZE	LENGTH		MK	TYPE STEEL	DIA	LENGTH	MK	TYPE STEEL	DIA	LENGTH	MK VI TYPE STEEL	MK VI DIA	MK VI LENGTH	MK V TYPE STEEL	MK V DIA	MK V LENGTH
	C32TIA 599	9	A242	2"x1½"x.25"	1'-0"	6'-1¼"		A242	1.14	6'-5"	2	A36	1.09	2'-7⅜"	A242	1.14	4⅜"	A242	1.14	2'-9½"

CORE END

El END	TRUSS DESIGNATION	BEARING ANGLES				WE	DIAGONAL "T" STRUT				VERTICAL "ST" STRUT			END STIFFENER										WEB "WC"				WEB "WT"			
		MK	TYPE STEEL	CHORD SIZE	LENGTH		MK	TYPE STEEL	DIA	LENGTH	MK	TYPE STEEL	DIA	LENGTH	MK VI TYPE STEEL	MK VI DIA	MK VI LENGTH	MK V1 TYPE T STEEL	MK V1 DIA	MK V1 LENGTH	MK V2 TYPE STEEL	MK V2 DIA	MK V2 LENGTH	MK V4 TYPE STEEL	MK V4 DIA	MK V4 LENGTH	MK	TYPE STEEL	PCS	DIA	LENGTH	MK	TYPE STEEL	PCS	DIA	LENGTH
	C32TIA-599	9	A242	2"x1½"x.25"	1'-7"	6'-9¾"	10	A242	1.14	5'-6½"	5	A242	1.14	2'-4¾"	A242	1.14	4¾"	—	—	—	—	—	—	A242	1.14	2'-2½"	4	A242	1	1.14	3'-0½"	—	—	—	—	—

CHECK DIMENSION FOR TRUSS FAB

LOCATION OF TRANS TRUSS				
CL-1	CL-2	CL-3	CL-4	Fs
9'-6½"	22'-10½"	36'-2½"	49'-8½"	5'-2½"

SKILLING HELLE CHRISTIANSEN ROBERTSON
Structural & Civil Engineers
3/20/68 SK

REF DRWGS.

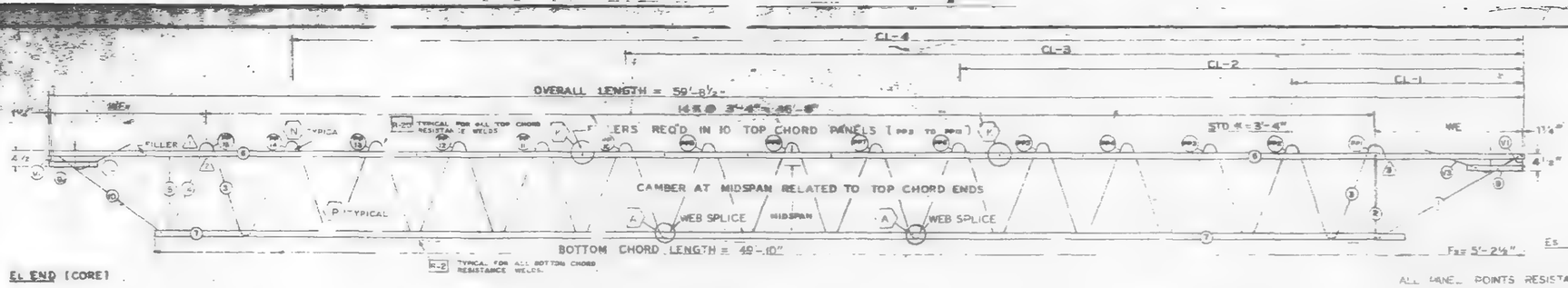
7-ABI-2	2-15-68
7-ABI-52 & 53	1-3-66
7-AB4-50 & 50.2	10-20-67
7-AB3-2	1-3-68
7-AB4-50.5	10-20-67

PAINT
LACLEDE ELECTROCOAT
RED NO. 10001

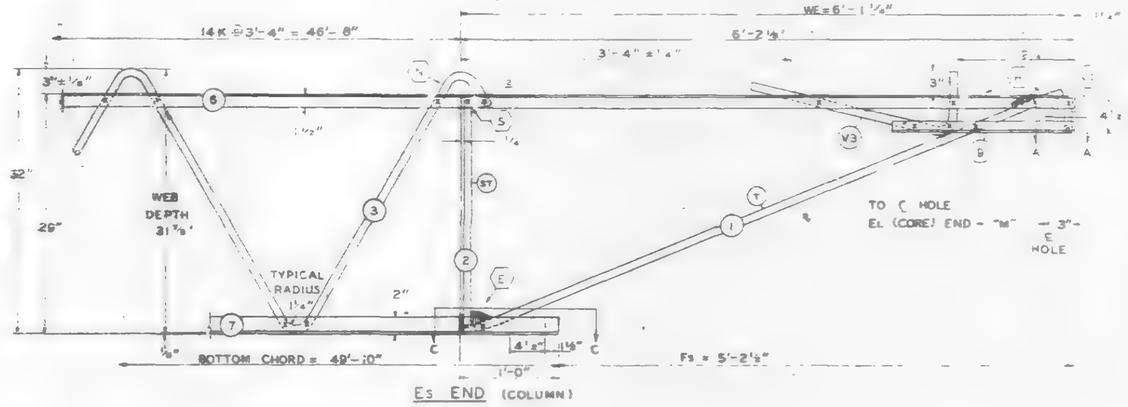
STEEL TRUSS DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY
FLOOR TRUSS C32TIA 59'-9" OVERALL
WORLD TRADE CENTER TOWERS A-B

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT: MADISON, ILLINOIS		DESIGN DRAWING NO 7-ABI-2 7-AB3-2	PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A.	DATE	DRAWN BY: [illegible] DATE: FEB. 24, 1968	
APPROVED FOR FABRICATION BY A.C. WEBER FOR FABRICATOR	DATE	CHECKED BY J.R. PAUL DATE FEB. 24, 1968	IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO. DETAILED BY: A.C. WEBER		FABRICATION CONT NO W.T.C. 221	SHEET NO ST201A

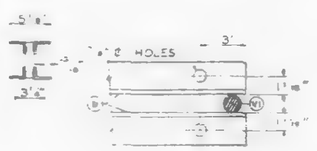


EL END (CORE)

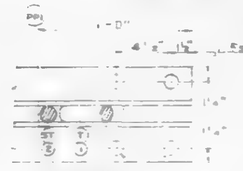


Es END (COLUMN)

TRUSS ELEVATION

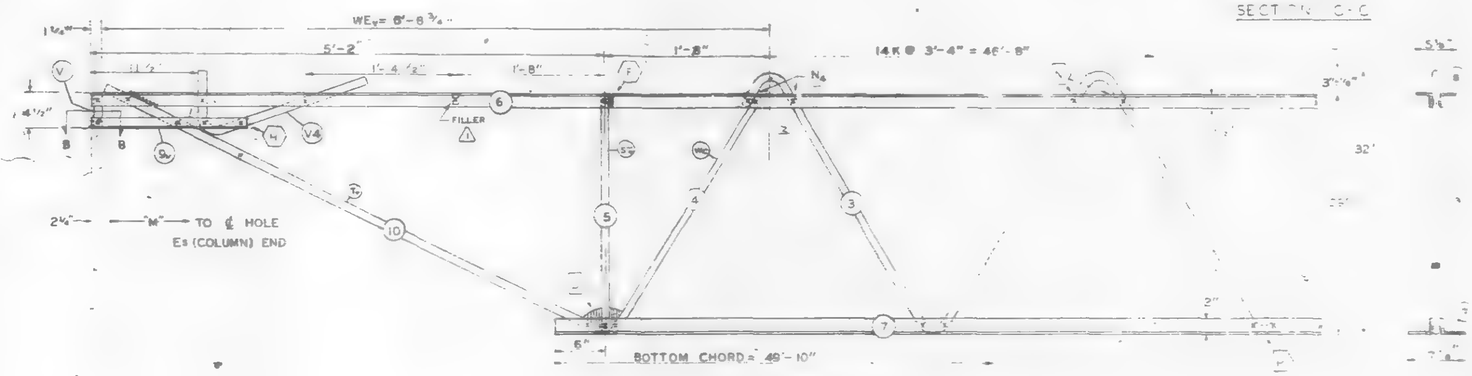


SECTION A-A



SECTION C-C

DAMPING UNIT CONNECTION PLATE ATTACHED TO BOTTOM CHORD (COL END) IN FIELD ASSEMBLY BY CONTRACT WTC 223.00.



EL END (CORE)

SECTION B-B

Es END :COLUMN: --

ALL PANEL POINTS RESISTANCE WELDED (R-2).
ARC WELDS INDICATED AT SHADED AREAS AND AT BOTTOM CHORD WEB SPLICES (▬).
ALL WELD DETAILS SHOWN ON SHEETS ST290 AND ST291.

SEE SHEET ST295 FOR V1, V3, & V4 DETAILS.
LETTERS IN HEXAGON INDICATE WELD DETAIL, ie., (A).
LETTERS AND NUMBERS IN SQUARES INDICATE RESISTANCE WELD STRENGTH IDENTIFIED IN THE QUALITY CONTROL PROGRAM, ie., R-2.

FABRICATION	
DESIGN DEPTH	32"
PANEL "K"	3'-4"
OVERALL LENGTH	59'-8½"
WEB DEPTH	31⅜"

NO.	DATE	REVISION
2	12-11-69	AS NOTED
1	3-18-68	FILLER AND WELD DETAIL

2 REF. DRWGS.

7-AB1-2	7-22-66
7-AB1-52	2-1-68
7-AB4-50	8-1-68
7-AB3-2	4-3-68
7-AB4-50.5	10-20-67
7-AB1-53	7-22-68

PAINT
LACLEDE ELECTROCOAT
RED NO. 10001

CHECK DIMENSION FOR TRUSS FAB
LOCATION OF TRANS TRUSS

CL-1	CL-2	CL-3	CL-4	Fs
9'-6 ½"	22'-10 ½"	36'-2 ½"	49'-6 ½"	5'-2½"

TRUSS DESIGNATION	TOP CHORD TWO ANGLES				BOTTOM CHORD TWO ANGLES				MAIN WEB "W"				FILLER	"M" ℄ HOLES	TRUSS DATA
	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	DIA	LENGTH	NO OF ℄	NO	DIA		
C32TIB-5985	6	A242	2"x1'-8"x.25"	59'-6	7	A36	3"x2"x.37"	49'-10"	3	A36	1.09	86'-1½"	.4 @ 3'-4" = 46'-8"	1	1.09	59'-3 ¼"	

COLUMN END

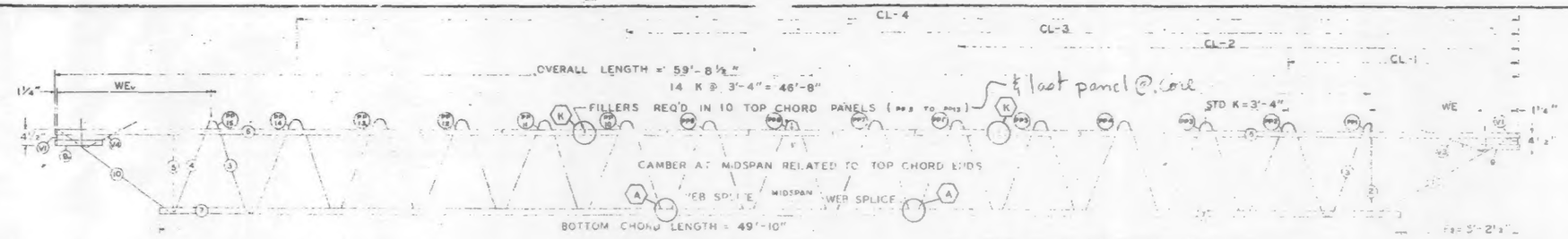
Es END	TRUSS DESIGNATION	BEARING ANGLES MK.	TYPE STEEL	CHORD SIZE	LENGTH	WE	DIAGONAL "T" STRUT MK.	TYPE STEEL	DIA	LENGTH	VERTICAL "ST" STRUT MK.	TYPE STEEL	DIA	LENGTH	END STIFFENER MK. V1 TYPE STEEL	DIA	LENG	MK. V3 TYPE	DIA	LENGTH
	C32TIB-5985	9	A242	2"x1'-8"x.25"	1'-10"	6'-11¼"	1	A242	L14	6'-5"	2	A36	1.09	2'-4⅝"	A242	L14	4⅝"	Ac.		2'-9 ⅛"

CORE END

El END	TRUSS DESIGNATION	BEARING ANGLES MK.	TYPE STEEL	CHORD SIZE	LENGTH	WE	DIAGONAL "T" STRUT MK.	TYPE STEEL	DIA	LENGTH	VERTICAL "ST" STRUT MK.	TYPE STEEL	DIA	LENGTH	END STIFFENER MK. V1 TYPE STEEL	DIA	LENGTH	MK. V2 TYPE STEEL	DIA	LENGTH	MK. V4 TYPE STEEL	DIA	LENGTH	WEB "WC" MK.	TYPE STEEL	PCS	DIA	LENGTH	WEB "WT" MK.	TYPE STEEL	PCS	DIA	LENGTH
	C32TIB-5985	8	A242	2"x1'-8"x.25"	1'-5"	6'-8 ¾"	10	A242	L14	5'-6 ⅝"	5	A242	L14	2'-4 ⅞"	A242	L14	4⅝"	—	—	—	A242	L14	2'-2 ½"	4	A242	1	L14	2'-1⅝"	—	—	—	—	—	—

STEEL TRUSS DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
FLOOR TRUSS C32TIB 59'-6½" OVERALL
WORLD TRADE CENTER TOWERS A-B

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT: MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB1-2 7-AB4-2 PLATE
APPROVED FOR FABRICATION BY: [illegible] FOR P.O.N.Y.A. DATE 7-25-68
DRAWN BY: [illegible] DATE: FEB. 21, 1968
APPROVED FOR FABRICATION BY: _____ FOR FABRICATOR DATE _____
CHECKED BY: [illegible] DATE: FEB. 26, 1968
DETAILED BY: LACLEDE STEEL CO.
FABRICATION CONT. NO. W.T.C. 221



EL END (CORE)

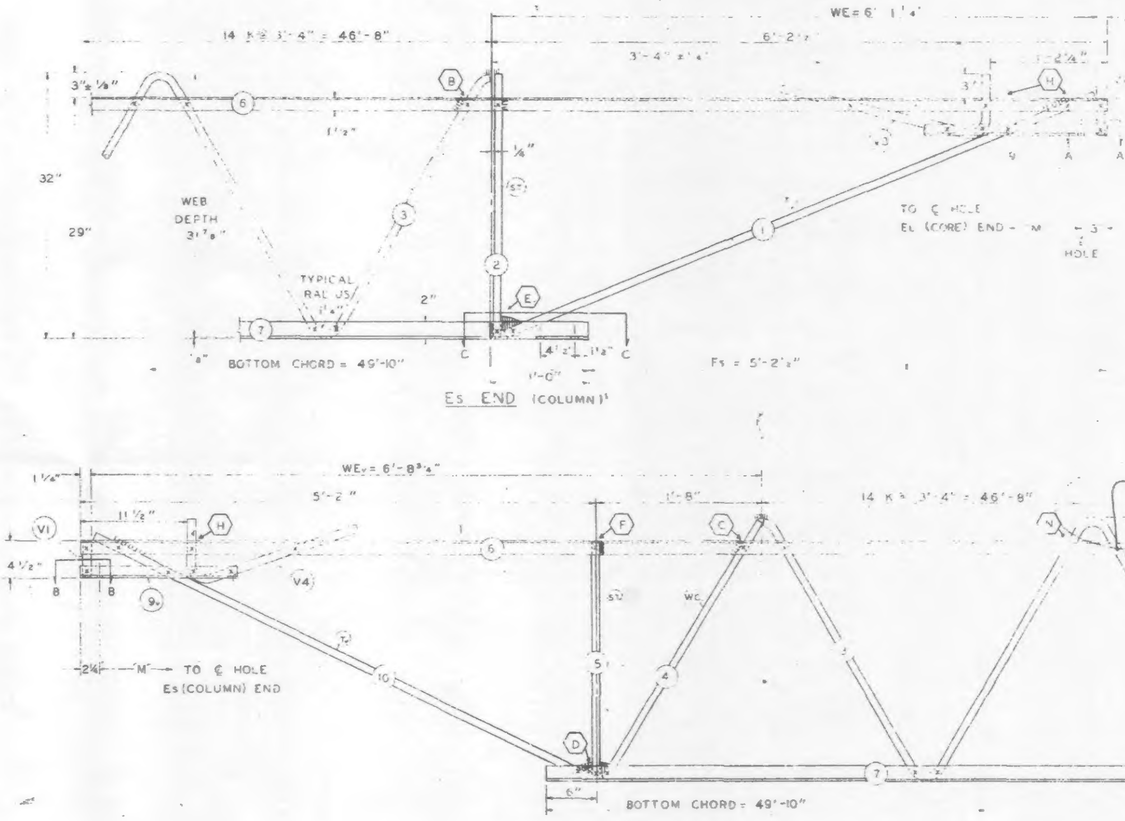
TRUSS ELEVATION

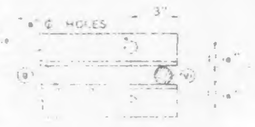
ES END (COLUMN)

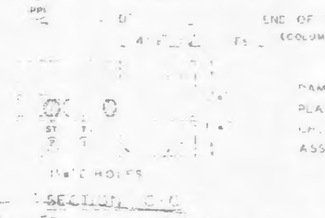
ALL PANEL POINTS RESISTANCE WELDED (x).
ARC WELDS INDICATED AT SHADED AREAS
AND AT BOTTOM CHORD WEB SPLICES (mm).

ALL WELD DETAILS SHOWN ON SHEETS ST290 AND ST291.
BOXED IN LETTERS INDICATE WELD DETAIL ... (A)

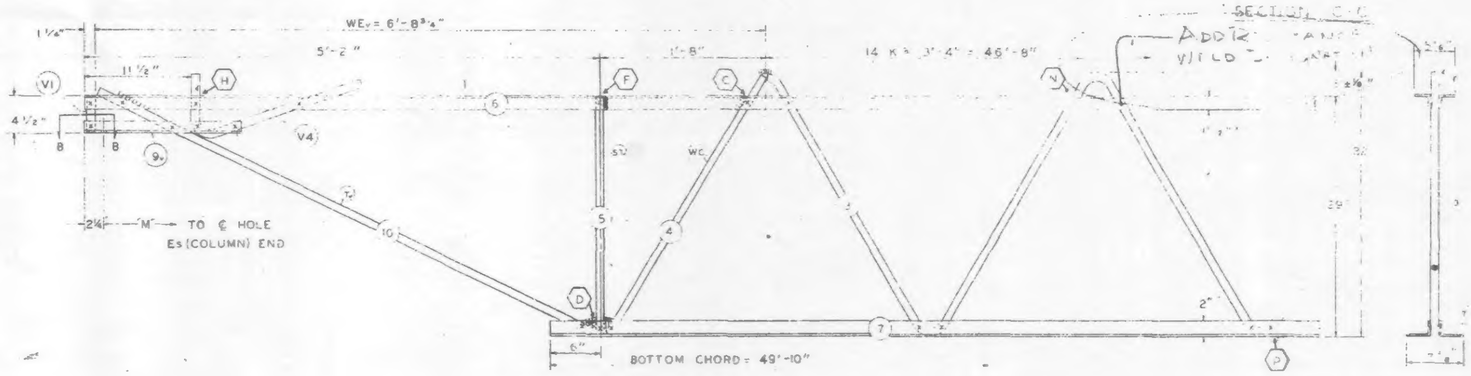
FABRICATION REQUIRMENTS		
	DESIGN	TOLERANCE
CAMBER AT MIDSPAN	1"	± 3/8"
DESIGN DEPTH	29"	± 1/4"
PANEL "K"	3'-	± 1/4"
OVERALL LENGTH	59'-1/2"	± 3/8
WEB DEPTH	31 7/8"	± 1/16



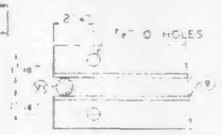




DAMPING UNIT - INSTALLATION PLATE ATTACHED TO BOTTOM CHORD SHIPPED TO FIELD ASSEMBLY BY CONTRACT WTC 22300.



EL END (CORE)



PAINT
LACLEDE ELECTROCOAT
RED NO 10001

REF DRWGS.

7-AB1-2	2-15-68
7-AB1-52	2-15-68
7-AB1-53	1-3-68
7-AB4-50 & 50.2	10-20-67
7-AB3-2	1-3-68
7-AB4-50.5	10-20-67

TRUSS DESIGNATION	TOP CHORD TWO ANGLES				BOTTOM CHORD TWO ANGLES				MAIN WEB "W"				FILLER	"M" ℄ HOLES	TRUSS DATA	
	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	DIA	LENGTH	NO OF K	NO	DIA		
C32T1B-598.5	6	A242	2"x1 1/2"x .25	59'-8 1/2"	7	A36	3"x2"x .37	49'-10"	3	A36	1.09	87'-2 1/4"	14 @ 3'-4" = 46'-8"	10	1.09	59'-3 1/4"	

COLUMN END

ES END TRUSS DESIGNATION	BEARING ANGLES MK.	TYPE STEEL	CHORD SIZE	LENGTH	WE	DIAGONAL "T" STRUT MK.	TYPE STEEL	DIA	LENGTH	VERTICAL "ST" STRUT MK.	TYPE STEEL	DIA	LENGTH	END STIFFENER MK VI TYPE STEEL	DIA	LENGTH	MK V3 TYPE STEEL	DIA	LENGTH
C32T1B-598.5	9	A242	2"x1 1/2"x .25	1'-10"	6'-1 1/4"	1	A242	1.14	6'-5"	2	A36	1.09	2'-7 7/8"	A242	1.14	4 3/8"	A	14	2'-9 1/2"

CORE END

EL END TRUSS DESIGNATION	BEARING ANGLES MK.	TYPE STEEL	CHORD SIZE	LENGTH	WEv	DIAGONAL "Tv" STRUT MK.	TYPE STEEL	DIA	LENGTH	VERTICAL "STv" STRUT MK.	TYPE STEEL	DIA	LENGTH	END STIFFENER MK VI TYPE STEEL	DIA	LENGTH	MK V2 TYPE STEEL	DIA	LENGTH	MK V4 TYPE STEEL	DIA	LENGTH	WEB "WC" MK.	TYPE STEEL	PCS	DIA	LENGTH	WEB "WT" MK.	TYPE STEEL	PCS	DIA	LENGTH
C32T1B-598.5	9	A242	2"x1 1/2"x .25	1'-6"	6'-8 3/4"	10	A242	1.14	5'-6 1/8"	5	A242	1.14	2'-4 3/4"	A242	1.14	4 3/8"	—	—	—	A242	1.14	2'-2 1/2"	4	A242	1	1.14	3'-0"	—	—	—	—	—

CHECK DIMENSION FOR TRUSS FAB LOCATION OF TRANS TRUSS

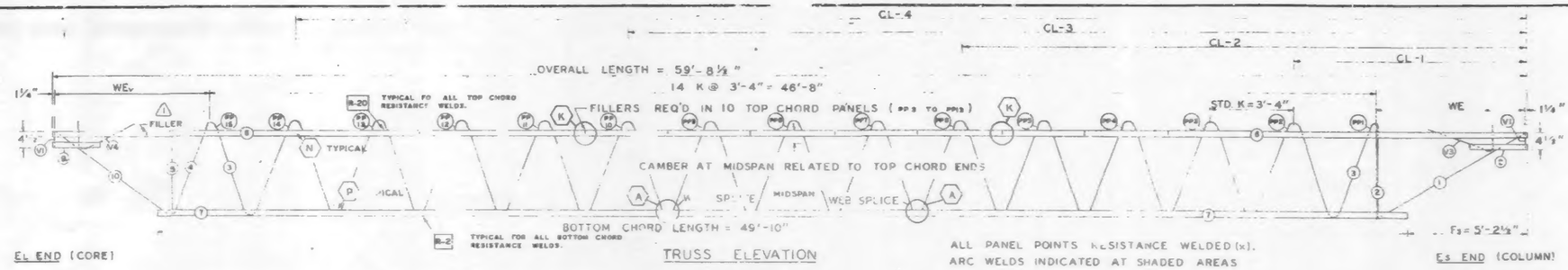
CL-1	CL-2	CL-3	CL-4	Fs
9'-6 1/2"	22'-10 1/2"	36'-2 1/2"	49'-6 1/2"	5'-2 1/2"

3/22/68 SK

STEEL TRUSS DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

FLOOR TRUSS C32T1B 59'-8 1/2" OVERALL
WORLD TRADE CENTER TOWERS A - B

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB1-2 7-AB3-2 PLATE
APPROVED FOR FABRICATION BY ___ FOR P.O.N.Y.A. DATE ___
DRAWN BY L.R. DATE: FEB. 26, 1968
APPROVED FOR FABRICATION BY ___ FOR FABRICATOR DATE ___
CHECKED BY J.R. PAUL DATE FEB. 26, 1968
IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO. DETAILED BY A.C. WEBER
FABRICATION CONT. NO W.T.C. 221
SHEET NO ST2018



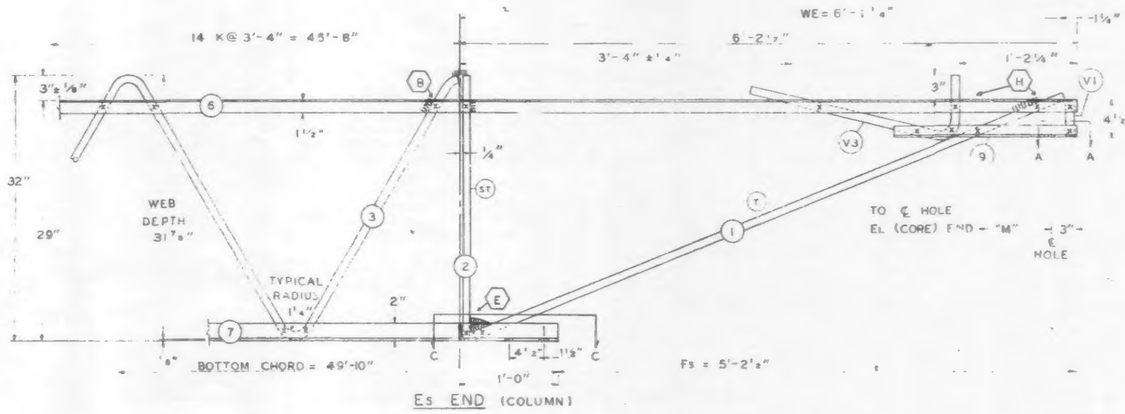
El END (CORE)

TRUSS ELEVATION

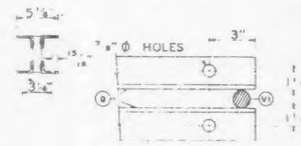
Es END (COLUMN)

ALL PANEL POINTS RESISTANCE WELDED (x).
ARC WELDS INDICATED AT SHADED AREAS
AND AT BOTTOM CHORD WEB SPLICES (HHH).

FABRICATION REQUIRMENTS		
	DESIGN	TOLERANCE
CAMBER AT MIDSPAN	1"	± 3/8"
DESIGN DEPTH	29"	± 1/4"
PANEL "K"	3'-4"	± 1/4"
OVERALL LENGTH	59'-8½"	± 3/8"
WEB DEPTH	31 7/8"	± 1/4"



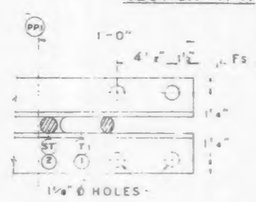
Es END (COLUMN)



SECTION A-A

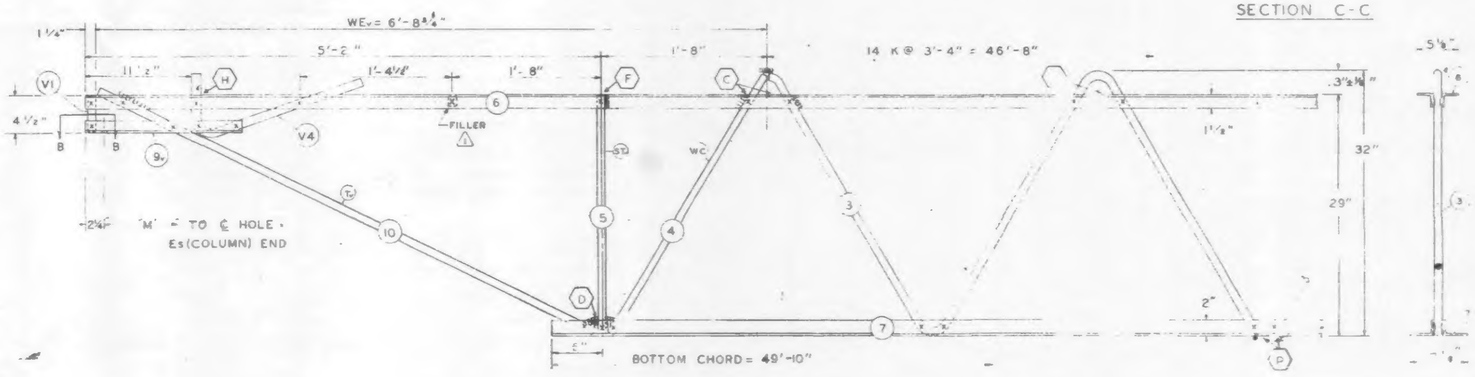
ALL WELD DETAILS SHOWN ON SHEETS ST290 AND ST291.

⚠ SEE SHEET ST295 FOR V1, V3, & V4 DETAILS.
LETTERS IN HEXAGON INDICATE WELD DETAIL, ie., (A).
LETTERS AND NUMBERS IN SQUARES INDICATE RESISTANCE WELD STRENGTH IDENTIFIED IN THE QUALITY CONTROL PROGRAM, ie., R-2.

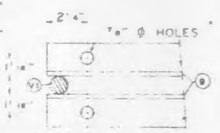


SECTION C-C

DAMPING UNIT CONNECTION PLATE ATTACHED TO BOTTOM CHORD (COL END) IN FIELD. ASSEMBLY BY CONTRACT WTC 223.00



El END (CORE)



SECTION B-B

NO.	DATE	REVISION	BY
⚠	3-19-68	FILLER AND WELD DETAIL	J.R.S

REF DRWGS.

7-AB1-2	2-15-68
7-AB1-52	2-15-68
7-AB1-53	1-3-68
7-AB4-50 & 50.2	10-20-67
7-AB3-2	1-3-68
7-AB4-50.3	10-20-67

PAINT

LACLEDE ELECTROCOAT
RED NO 10001

TRUSS DESIGNATION	TOP CHORD TWO ANGLES				BOTTOM CHORD TWO ANGLES				MAIN WEB "W"					FILLER	℄ "M" ℄ HOLES	TRUSS DATA
	MK	TYPE STEEL	CHORD SIZE	LENGTH	MK	TYPE STEEL	CHORD SIZE	LENGTH	MK	TYPE STEEL	DIA	LENGTH	NO OF K	NO	DIA	
C32T1B-5985	6	A242	2"x1½"x.23	59'-8½"	7	A36	3"x2"x.37	49'-10"	3	A36	1.09	87'-2½"	14 @ 3'-4" = 46'-8"	1	1.09	59'-3 1/4"	

COLUMN END

Es END	TRUSS DESIGNATION	BEARING ANGLES MK	BEARING ANGLES TYPE STEEL	BEARING ANGLES CHORD SIZE	BEARING ANGLES LENGTH	WE	DIAGONAL "T" STRUT MK	DIAGONAL "T" STRUT TYPE STEEL	DIAGONAL "T" STRUT DIA	DIAGONAL "T" STRUT LENGTH	VERTICAL "ST" STRUT MK	VERTICAL "ST" STRUT TYPE STEEL	VERTICAL "ST" STRUT DIA	VERTICAL "ST" STRUT LENGTH	END STIFFENER MK V1 TYPE STEEL	END STIFFENER MK V1 DIA	END STIFFENER MK V1 LENGTH	END STIFFENER MK V3 LENGTH
	C32T1B-5985	9	A242	2"x1½"x.25	1'-10"	6'-1"±¼"	1	A242	1¼"	5'-5"	2	A36	1"	2'-7"±¼"	A242	1⅛"	4'-½"	5'-2½"

CORE END

El END	TRUSS DESIGNATION	BEARING ANGLES MK	BEARING ANGLES TYPE STEEL	BEARING ANGLES CHORD SIZE	BEARING ANGLES LENGTH	WE	DIAGONAL "T" STRUT MK	DIAGONAL "T" STRUT TYPE STEEL	DIAGONAL "T" STRUT DIA	DIAGONAL "T" STRUT LENGTH	VERTICAL "ST" STRUT MK	VERTICAL "ST" STRUT TYPE STEEL	VERTICAL "ST" STRUT DIA	VERTICAL "ST" STRUT LENGTH	END STIFFENER MK V1 TYPE STEEL	END STIFFENER MK V1 DIA	END STIFFENER MK V1 LENGTH	END STIFFENER MK V3 LENGTH
	C32T1B-5985	8	A242	2"x1½"x.25	1'-10"	6'-1"±¼"	1	A242	1¼"	5'-5"	2	A36	1"	2'-7"±¼"	A242	1⅛"	4'-½"	5'-2½"

CHECK DIMENSION FOR TRUSS FAB LOCATION OF TRANS TRUSS

CL-1	CL-2	CL-3	CL-4	Fs
9'-6½"	22'-10½"	36'-2½"	49'-6½"	5'-2½"

	WEB "Wc" MK V4	WEB "Wc" A	WEB "Wc" LENGTH	WEB "W" MK	WEB "W" TYPE STEEL	WEB "W" PCS	WEB "W" DIA	WEB "W" LENGTH	WEB "W" MK	WEB "W" TYPE STEEL	WEB "W" PCS	WEB "W" DIA	WEB "W" LENGTH
	4	2'-5"		4	A242	1	1¼"	3'-0"					

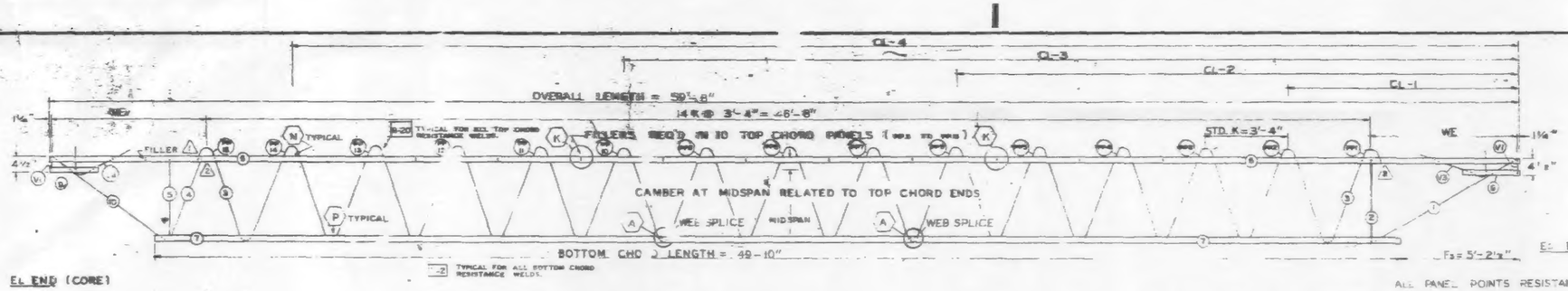
STEEL TRUSS DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

FLOOR TRUSS C32T1B 59'-8½" OVERALL

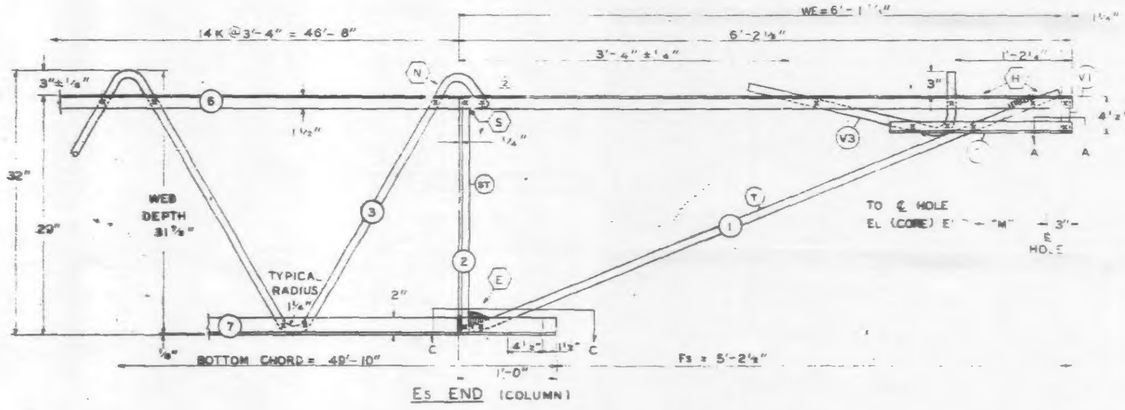
WORLD TRADE CENTER TOWERS A - B

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT: MADISON, ILLINOIS	DESIGN DRAWING NO. 7-AB1-2 7-AB3-2 PLATE
APPROVED FOR FABRICATION BY: _____ FOR P.O.N.Y.& N.J. DATE 4/11/68	DRAWN BY L.B. DATE FEB. 26, 1969
APPROVED FOR FABRICATION BY _____ FOR FABRICATOR DATE	CHECKED BY J.S. REILLY DATE FEB. 26, 1968
DETAILED BY A.C. WEBER	FABRICATION CONT NO. W.T.C. 221

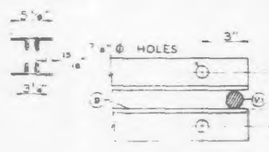


EL END (CORE)

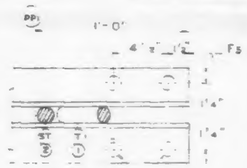


ES END (COLUMN)

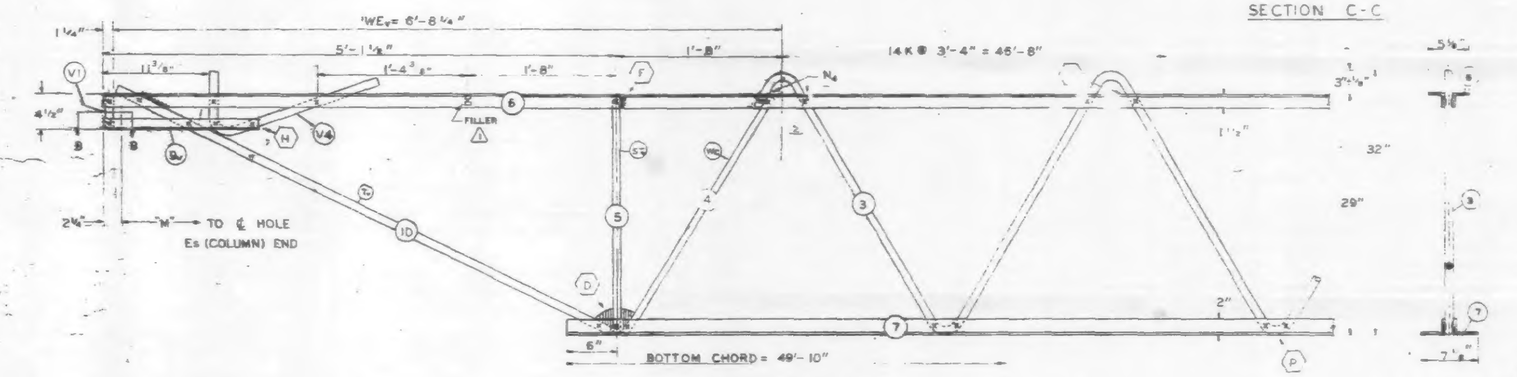
TRUSS ELEVATION



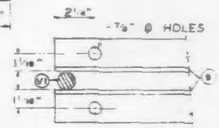
SECTION A-A



SECTION C-C



EL END (CORE)



SECTION B-B

ALL PANEL POINTS RESISTANCE WELDED ⚡.
ARC WELDS INDICATED AT SHADED AREAS AND AT BOTTOM CHORD WEB SPLICES ⚡.
ALL WELD DETAILS SHOWN ON SHEETS ST290 AND ST291.

SEE SHEET ST295 FOR V1, V3, & V4 DETAILS.
LETTERS IN HEXAGON INDICATE WELD DETAIL, ie., (A).
LETTERS AND NUMBERS IN SQUARES INDICATE RESISTANCE WELD STRENGTH IDENTIFIED IN THE QUALITY CONTROL PROGRAM, ie., [P-2].

DAMPING UNIT CONNECTION PLATE ATTACHED TO BOTTOM CHORD TOOL END IN FIELD. ASSEMBLY BY CONTRACT WTC 223.00.

FABRICATION TOLERANCES		
CAMBER AT MIDSPAN	Δ	± 1/4"
DESIGN DEPTH		± 1/8"
PANEL "K"	3'-4"	± 1/16"
OVERALL LENGTH	59'-8"	± 3/8"
WEB DEPTH	7'-0"	± 1/4"

NO.	DATE	REVISION
2	2-11-68	AS NOTED
1	3-10-68	FILLER AND WELD DETAIL

⚠ REF. DRWGS.

7-AB1-2	7-22-68
7-AB1-32	2-15-68
7-AB4-50	8-1-68
7-AB3-2	1-9-68
7-AB4-50.5	10-30-67
7-AB1-53	7-25-68

PAINT
LACLEDE ELECTROCOAT
RED NO. 10001

TRUSS DESIGNATION	TOP CHORD TWO ANGLES				BOTTOM CHORD TWO ANGLES				MAIN WEB "W"				FILLER	℄ "M" ℄ HOLES		TRUSS DATA	
	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	DIA.	LENGTH	NO. OF ℄	NO	DIA.		
C32TIC-59'8	6	A242	2"x1 1/8"x.25"	59'-2"	7	A36	3"x2"x.37"	49'-10"	3	A36	1.09	88'-1 1/4"	14 @ 3'-4" = 46'-8"	11	1.09	59'-2 3/4"	

COLUMN END

Es END	TRUSS DESIGNATION	BEARING ANGLES				WE	DIAGONAL "T" STRUT				VERTICAL "ST" STRUT				END STIFFENER						WEB "WC"				WEB "WT"			
		MK.	TYPE STEEL	CHORD SIZE	LENGTH		MK.	TYPE STEEL	DIA.	LENGTH	MK.	TYPE STEEL	DIA.	LENGTH	MK. V1 TYPE STEEL	MK. V1 DIA.	MK. V1 LENGTH	MK. V3 TYPE STEEL	MK. V3 A	MK. V3 LENGTH	MK.	TYPE STEEL	PCS	DIA	LENGTH	MK.	TYPE STEEL	PCS	DIA	LENGTH
	C32TIC-59'8	9	A242	2"x1 1/8"x.25"	1'-10"	6'-11 1/4"	1	A242	1.14	6'-5"	2	A36	1.09	2'-4 7/8"	A242	1.14	4'-3"	A242		9'-2"									

CORE END

EL END	TRUSS DESIGNATION	BEARING ANGLES				WE	DIAGONAL "T" STRUT				VERTICAL "ST" STRUT				END STIFFENER MK. V1			END STIFFENER MK. V2			END STIFFENER MK. V4			WEB "WC"					WEB "WT"				
		MK.	TYPE STEEL	CHORD SIZE	LENGTH		MK.	TYPE STEEL	DIA.	LENGTH	MK.	TYPE STEEL	DIA.	LENGTH	TYPE STEEL	DIA.	LENGTH	TYPE STEEL	DIA.	LENGTH	TYPE STEEL	DIA.	LENGTH	MK.	TYPE STEEL	PCS	DIA.	LENGTH	MK.	TYPE STEEL	PCS	DIA.	LENGTH
	C32TIC-59'8	9	A242	2"x1 1/8"x.25"	1'-6"	6'-8 1/4"	10	A242	1.14	5'-5 1/2"	5	A242	1.14	2'-4 7/8"	A242	1.14	4'-3 1/4"	—	—	—	A242	1.14	2'-2 1/2"	4	A242	1	1.14	2'-10"	—	—	—	—	—

CHECK DIMENSION FOR TRUSS FAB

LOCATION OF TRANS TRUSS				
CL-1	CL-2	CL-3	CL-4	Fs
9'-6 1/2"	22'-10 1/2"	36'-2 1/2"	49'-5 1/2"	5'-2 1/4"

STEEL TRUSS DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
FLOOR TRUSS C32TIC 59'-8" OVERALL
WORLD TRADE CENTER TOWERS A-B

FABRICATION BY: LACLEDE STEEL COMPANY
FABRICATED AT: MADISON, ILLINOIS
APPROVED FOR FABRICATION FOR P.D.N.Y.A. DATE: 2/28/69
APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE:
DETAILED BY:
DESIGN DRAWING NO. 7-AB1-2 7-AB3-2 - PLATE
DRAWN BY: [illegible] DATE: FEB. 25, 1969
CHECKED BY: J.R. SMALL DATE: FEB. 24, 1969
FABRICATION CONT. NO. W.T.C. 221
SHEET ST-2

ω-CI = 131.1.

#900 — 999

is missing.